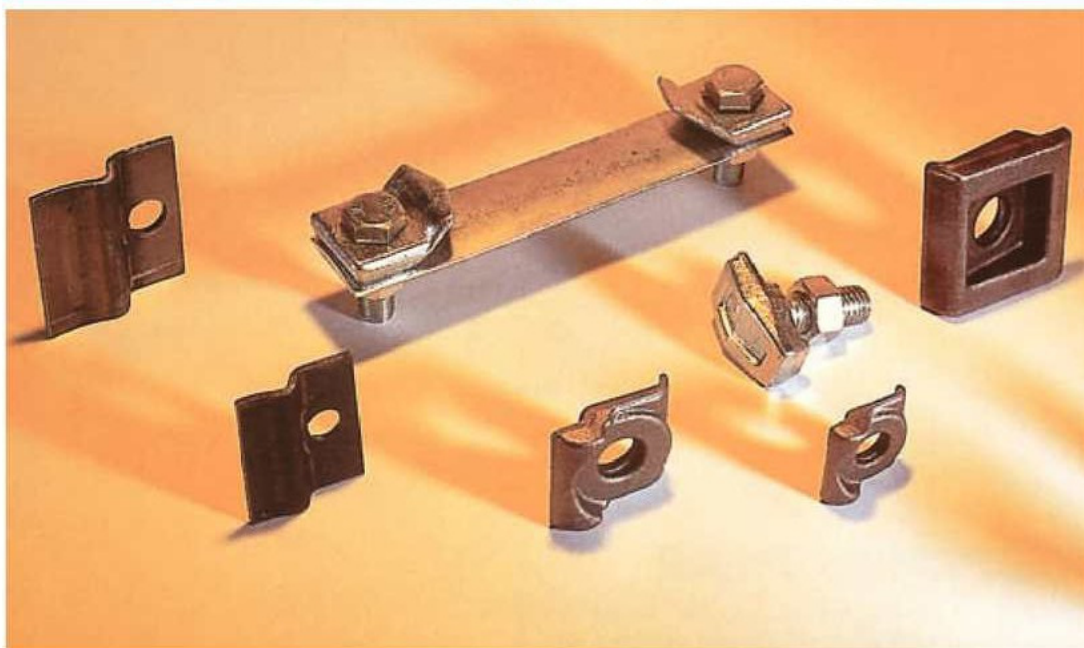


Fishplates are supplied in accordance with International and Customer specific standards. Special application fishplates such as Extra Thick, T-Plates, Minimum Clearance Seismic Plates (in accordance to ASME A17.1 for earthquake zone requirements) and the Ultra System are supplied to enhance joint performances on high speed application in conjunction with High Quality and Match guide rails. Clips including forged clips, sliding clips and special fastening systems as well as guide rail fixing systems, are supplied according to the various global code and Customer requirements.

Accessories

Fishplates

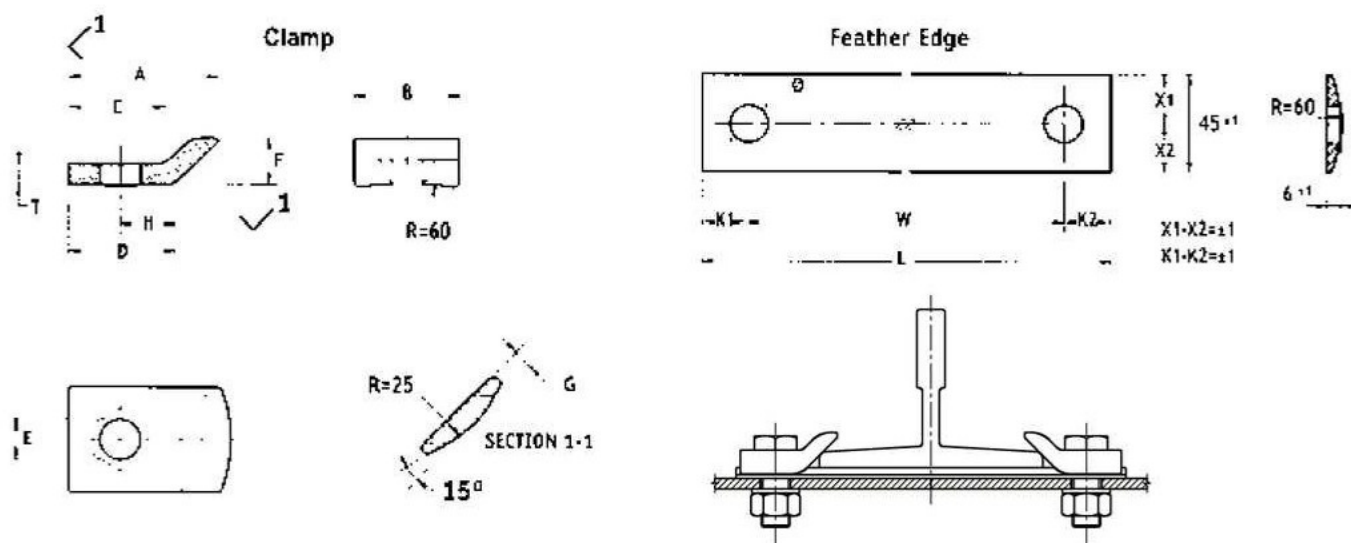


Clips

SLIDING CLAMPS

Hot forged sliding guide rail clamping system. Engineered to provide a point bearing contact used in conjunction with the Feather Edge radius guide rail seat. This clamp system provides the strength of a forged clip with the flexibility of the sliding clip.

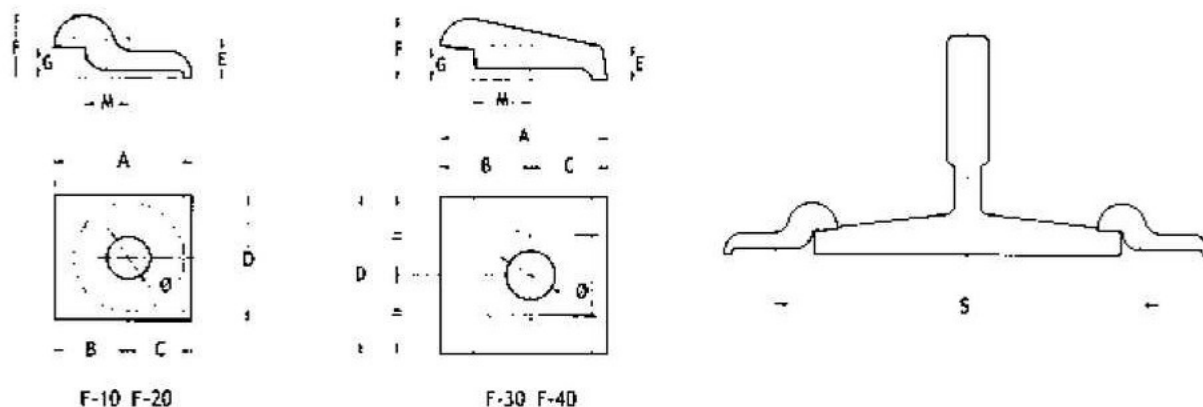
Monteferro Code	Applicable Guide Rail Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	T mm	L mm	W mm	Ø mm	Bolt size
Tolerances		±1	±1	±0,5	±1	±0,5	±0,75	±0,5	±0,5	±0,5	±15	±0,75	±0,5	
SL-F 10	RT50 - RF50	44	40	29	33	14	14	8	18	7	129	95	17	M12x45
SL-F 20	RT70 - RF70 - RF70.9	44	40	29	33	14	14	8	18	7	151	117	17	M12x45
SL-F 30	RF75 - RP75 - RP78	44	40	29	33	14	14	8	18	7	156	122	17	M12x45
SL-F 40	RF89 - RP89 - RF90 - RP90	44	40	29	33	14	14	8	18	7	172	138	17	M12x45
SL-F 45	RP125 - RP127-1	55	45	35	38	18	20	9	18	10	218	174	21	M16x50
SL-F 50	RP127-2 - RP127-2 C14	55	45	35	38	18	20	9	18	10	227	183	21	M16x50
SL-F 60	RP140-1	55	45	35	38	18	20	9	18	10	242	198	21	M16x50
SL-F 70	RP140-2	55	45	35	38	18	20	9	18	10	250	203	21	M16x50



FORGED CLIPS

Hot forged rigid guide rail clamping system. Recommended for application where guide rail stack movement is not expected.

Monteferro Code	Applicable Guide Rail Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	M mm	Ø mm	S mm	Bolt size
Tolerances		±15	±15	±15	±15	±15	±1	±15	±15	±1	±2	
F 10	RF89 - RP89 - RF90 - RP90	41	22	19	41	10	18	8	12,5	14,5	115	M12x45
	RP114										150	
F 20	RP125	55,5	30	25,5	51	16	25,5	12,5	17,5	17,5	162	M16x50
	RP127-1/2 - RP127-2 c14										164	
	RP140-1										175	
F 30	RP140-2	70	38	32	65	16	25,5	12,5	24	20,5	188	M18x50
F 40	RP140-3	70	38	32	76	19	28,5	19	24	20,5	188	M18x50

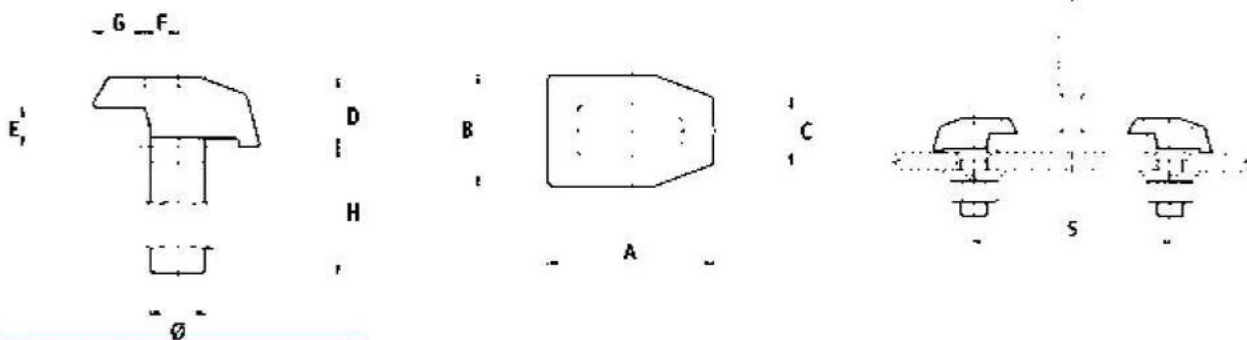


DIFFERENT GUIDE RAILS CLIPS: ACCORDING TO DEFINITION WITH CUSTOMER

T-CLIPS

Hot forged rigid guide rail clamping system. Recommended for application where guide rail stack movement is not expected. These clips come complete with threaded shank and nut. T-Clips are available both in burnished and zinc-coated finishing

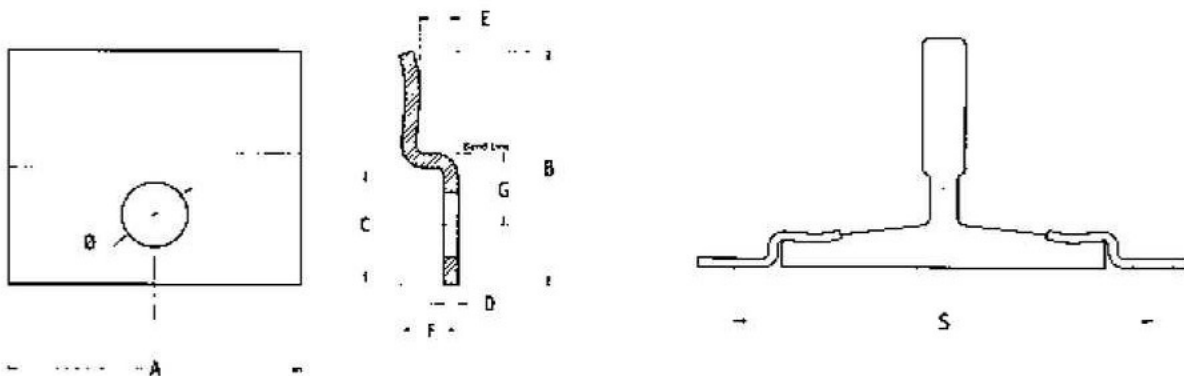
Monteferro Code	Applicable Guide Rail Size	Ø mm	A mm ±13	B mm ±13	C mm +15/0	D mm ±1	E mm ±1	F mm ±0,5	G mm ±1	H mm ±13	S mm ±2
T1	RT40 RT45 RT50 - RF50 RF65	M10	32	22	15	12	5,5	5	11	23	50 55 60 75
T2	RT70 - RF70 - RF70.9 RF75 - RP75 RF82 - RP82	M12	39	26	16	15	7,3	6,5	13	27	83 88 95
T3	RT80 RP78 RF89 - RP89 RF90 - RP90	M14	45	29	16	18,5	9,5	8	13	34	96 94 105 106
T4	RP114 RP125 RP127-1	M16	50	34	16	20,5	10,5	8,5	15	40	131 142 144
T5	RP127-2 - RP127-2 c14 RP140-1 - RP140-2	M18	55	37	18	23	13	11	17	42	144 162



SLIDING CLIPS

Pressed steel sliding guide rail clamping system. Recommended for application where guide rail stack movement is required due to thermal expansion or building settlement.

Monteferro Code	Applicable Guide Rail Size	Ø mm	A mm ±0,5	B mm ±0,5	C mm ±0,5	D mm ±0,1	E mm ±0,5	F mm ±0,5	G mm ±0,5	S mm ±2	Bolt size
SL - P03	RT70 - RF70 - RF70.9 RF75 RF82 - RP82	13	76	60	31	5	4,5	14,5	18,5	109 114 121	M12x35
SL - P05	RP75 RP78 RT80	13	76	70	31	5	7,5	14,5	18,5	114 118 120	M12x35
SL - P10	RF89 - RP89 RF90 - RP90 RP114 RP125 RP127-1	15	76	70	31	5	9	14,5	18,5	128 128 152 162 166	M12x35
SL - P20	RP127-2 - RP127-2 c14 RP140-1	17,5	76	70	33	5	14,5	20,5	19	166 178	M16x50



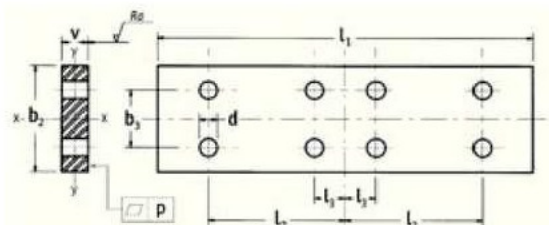
SPECIAL THICKNESS FISHPLATES

Monteferro Code	d mm	b ₂ mm	b ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	v * mm	w _{xx} cm ³	w _{yy} cm ³	weight kg/pc	bolt size
Tolerances		±1,5	±0,2	±1,5	±0,2	±0,2	0/+2				
RP75	13	75	43	240	90	30	12	11,25	1,80	1,60	M 12x35
RP78	13	75	43	240	90	30	12	11,25	1,80	1,60	M 12x35
RP82	13	80	50,8	216	81	27	20	21,33	5,33	2,55	M 12x45
RP89	13	90	57,2	305	114,3	38,1	20 30	27,00 40,50	6,00 13,50	4,14 6,21	M 12x45 M 12x55
RP90	13	90	57,2	305	114,3	38,1	20 30	27,00 40,50	6,00 13,50	4,14 6,21	M 12x45 M 12x55
RP114	17	130	79,4	305	114,3	38,1	30 40 50	84,50 112,67 140,83	19,50 34,67 54,17	8,91 11,88 14,85	M 16x60 M 16x70 M 16x80
RP125	17	130	79,4	305	114,3	38,1	30 35 40 50	84,50 98,58 112,67 140,83	19,50 26,54 34,67 54,17	8,91 10,40 11,88 14,85	M 16x60 M 16x70 M 16x70 M 16x80
RP127	17	130	79,4	305	114,3	38,1	30 35 40 50	84,50 98,58 112,67 140,83	19,50 26,54 34,67 54,17	8,91 10,40 11,88 14,85	M 16x60 M 16x70 M 16x70 M 16x80
RP140	21	140	92,1	380	152,4	31,8	40 50 75	130,67 163,33 245,00	37,33 58,33 131,25	15,84 19,79 29,69	M 20x90 M 20x100 M 20x120

*Other thickness under request

$$\frac{3,2}{\nabla} \leq \frac{Ra}{\nabla} \leq \frac{6,3}{\nabla}$$

p = 0,1 mm

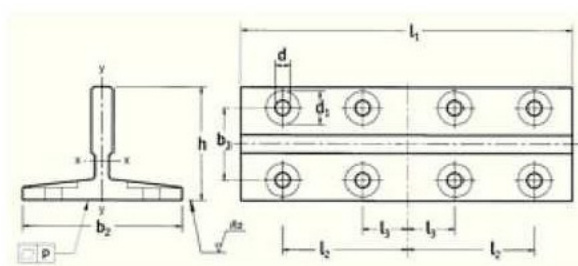


T SECTION FISHPLATES

Monteferro Code	d mm	d ₁ mm	b ₂ mm	b ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	h mm	w _{xx} cm ³	w _{yy} cm ³	weight kg/pc	bolt size
Tolerances			±1,5	±0,2	±1,5	±0,2	±0,2	±0,1				
RP75	13	26	75	43	240	90	30	61	9,29	7,06	2,1	M 12x35
RP78	13	26	78	43	240	90	30	55	7,56	6,71	1,8	M 12x35
RP82	13	26	82,5	50,8	216	81	27	66,6	10,2	7,40	1,36	M 12x35
RP89	13	26	89	57,2	305	114,3	38,1	61	14,25	11,80	3,8	M 12x35
RP90	13	26	90	57,2	305	114,3	38,1	74	20,87	11,80	4,1	M 12x35
RP114	17	33	114	79,4	305	114,3	38,1	88	29,70	19,10	5,0	M 16x50
RP125	17	33	125	79,4	305	114,3	38,1	81	26,20	25,40	5,5	M 16x50
RP127-1	17	33	127	79,4	305	114,3	38,1	88	30,40	23,40	5,4	M 16x50
RP127-2	17	33	127	79,4	305	114,3	38,1	88	30,90	36,20	6,9	M 16x50
RP127-2 c 14	17	33	127	79,4	305	114,3	38,1	88	31,06	36,25	7,0	M 16x50
RP140-1	21	40	140	92,1	380	152,4	31,8	107	53,40	44,30	10,5	M 20x65
RP140-2	21	40	140	92,1	380	152,4	31,8	101	68,00	51,20	12,9	M 20x65
RP140-3	21	40	140	92,1	380	152,4	31,8	126	114,60	69,40	17,5	M 20x65

$$\frac{3,2}{\nabla} \leq \frac{Ra}{\nabla} \leq \frac{6,3}{\nabla}$$

p = 0,1 mm



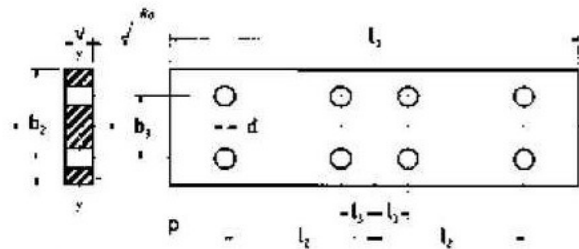
MONTEFERRO FISHPLATE RANGE ALSO INCLUDE:

THREADED (TAPPED) FISHPLATES, MINIMUM CLEARANCES SEISMIC FISHPLATE, SPECIAL FISHPLATE FOR HIGH SPEED APPLICATION

COLD DRAWN GUIDE RAIL FISHPLATES

Monteferro Code	d mm	b ₂ mm	b ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	v mm	w _{xx} cm ³	w _{yy} cm ³	weight kg/pcs	bolt size
Tolerances		±1,5	±0,2	±1,5	±0,2	±0,2	0/+2				
RT40	9	40	23	200	85	15	6	1,60	0,24	0,35	M 8x25
RT45	9	50	25	160	65	15	8	3,33	0,53	0,50	M 8x25
RT50	9	50	30	200	75	25	8	3,33	0,53	0,60	M 8x25
RT70	13	70	42	250	105	25	10	8,17	1,17	1,29	M 12x35
RT80	13	80	42	250	105	25	10	10,67	1,33	1,49	M 12x35
RF50	9	50	30	200	75	25	8	3,33	0,53	0,60	M 8x25
RF65	10	70	40	160	65	15	10	8,17	1,17	0,83	M 10x30
RF70	13	70	42	250	105	25	10	8,17	1,17	1,29	M 12x35
RF70-9	13	75	43	240	90	30	10	9,38	1,25	1,33	M 12x35
RF75	13	75	43	240	90	30	10	9,38	1,25	1,33	M 12x35
RF82	13	80	50,8	216	81	27	10	10,67	1,33	1,27	M 12x35
RF89	13	90	57,2	305	114,3	38,1	10	13,50	1,50	2,07	M 12x35
RF90	13	90	57,2	305	114,3	38,1	10	13,50	1,50	2,07	M 12x35

$$\frac{Ra}{p} = \frac{Ra}{0,2 \text{ mm}}$$



MACHINED GUIDE RAIL FISHPLATES

Monteferro Code	d mm	b ₂ mm	b ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	v mm	w _{xx} cm ³	w _{yy} cm ³	weight kg/pc	bolt size
Tolerances		±1,5	±0,2	±1,5	±0,2	±0,2	0/+2				
RP75	13	75	43	240	90	30	10	9,38	1,25	1,33	M 12x35
RP78	13	75	43	240	90	30	10	9,38	1,25	1,33	M 12x35
RP82	13	80	50,8	216	81	27	10	10,67	1,33	1,27	M 12x35
RP89	13	90	57,2	305	114,3	38,1	13	17,55	2,54	2,70	M 12x35
RP90	13	90	57,2	305	114,3	38,1	13	17,55	2,54	2,70	M 12x35
RP114	17	130	79,4	305	114,3	38,1	17	47,88	6,26	5,00	M 16x50
RP125	17	130	79,4	305	114,3	38,1	17	47,88	6,26	5,00	M 16x50
RP127-1	17	130	79,4	305	114,3	38,1	17	47,88	6,26	5,00	M 16x50
RP127-2	17	130	79,4	305	114,3	38,1	17	47,88	6,26	5,00	M 16x50
RP 127-2 c 14	17	130	79,4	305	114,3	38,1	17	47,88	6,26	5,00	M 16x50
RP140-1	21	140	92,1	380	152,4	31,8	25	81,67	14,58	11,00	M 20x65
RP140-2	21	140	92,1	380	152,4	31,8	25	81,67	14,58	11,00	M 20x65
RP140-3	21	140	92,1	380	152,4	31,8	30	98,00	21,00	13,20	M 20x80

$$\frac{3,2}{p} \leq \frac{Ra}{p} \leq \frac{6,3}{p}$$

p = 0,2 mm

