



easy triflex[®]

For simple multi-axis applications,
easy filling from both sides



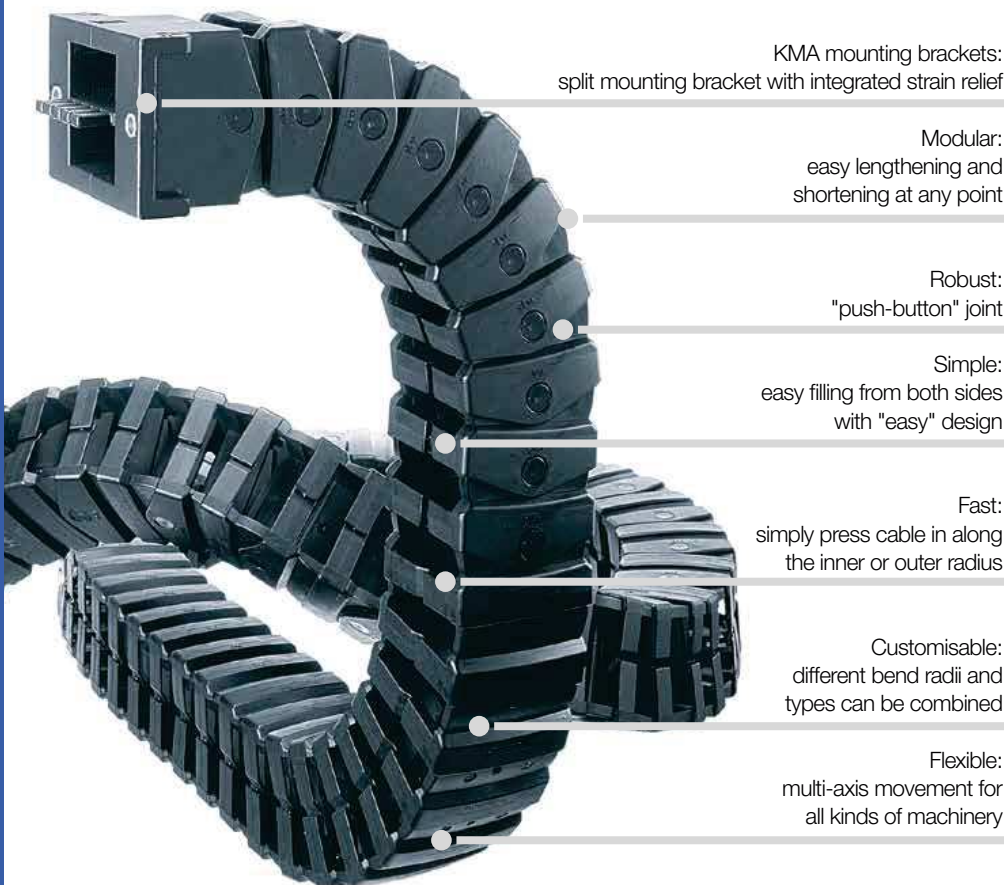
easy triflex[®] advantages:

- Easy filling with "easy" design
- Easy filling from both sides
- Easy to replace or combine with existing triflex[®] systems
- If square space is required



When to use another 3D e-chain[®] series:

- For complex robot applications
 - ▶ triflex[®] R - TRE, page 970
- For circular movements with high loads
 - ▶ twisterchain system, page 1086



KMA mounting brackets:
split mounting bracket with integrated strain relief

Modular:
easy lengthening and shortening at any point

Robust:
"push-button" joint

Simple:
easy filling from both sides with "easy" design

Fast:
simply press cable in along the inner or outer radius

Customisable:
different bend radii and types can be combined

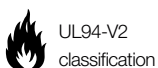
Flexible:
multi-axis movement for all kinds of machinery

For simple 3D applications, easy filling from both sides - easy triflex®

The easy triflex® series was developed to offer safe energy supply for multi-axis movements. In doing so the flexibility of a hose was combined with the stability and defined bend radius of an e-chain®. With easy triflex® the installation of cables and hoses is simple. With flexible crossbars the cables are simply pushed into the e-chain® from either side. The unique modular range allows very complex movements. For example it is possible to combine 1- 2- and 3-axis links in one e-chain®.

Typical industries and applications

- Machine tools ● Robots ● Handling Equipment ● Material handling ● Plastics industry ● Construction machinery ● Vehicles production ● General mechanical engineering ● Medical equipment ● Office furniture



Series	Inner height <i>Bi1 / Bi1</i> [mm]	Inner width <i>Bi3</i> [mm]	Outer width <i>Ba</i> [mm]	Bend radius <i>R</i> [mm]	Pitch [mm]	Page
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Single-axis movement - "easy" design
easy filling from both sides

E332.25	13	25	34	048 - 200	14.5	1066
E332.32	17	32	50	075 - 250	25	1066
E332.50	26	50	68	100 - 250	30	1066
E332.75	38.5	75	96	140 - 300	36	1066



Double-axis movement - "easy" design
with *RBR* (Reverse Bend Radius)
easy filling from both sides

E332.25	13	25	34	048 - 200	14.5	1067
E332.32	17	32	50	075 - 250	25	1067
E332.50	26	50	68	100 - 250	30	1067
E332.75	38.5	75	96	140 - 300	36	1067



Triple-axis movement - "easy" design
with *RBR* (Reverse Bend Radius)
easy filling from both sides

E333.25	13	25	34	048 - 200	14.5	1068
E333.32	17	32	50	075 - 250	25	1068
E333.50	26	50	68	100 - 250	30	1068
E333.75	38.5	75	96	140 - 300	36	1068






Available from stock. Ready to ship in 24 - 48hrs.*


*Average time before the ordered goods are dispatched.




Technical data

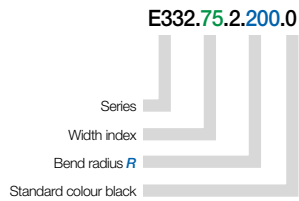
	Speed / acceleration	upon request
	Material - permitted temperature °C, igumid NB	-40°C / +120°C
	Flammability class, igumid NB	VDE 0304 IIC UL94-V2


Order example | Order key

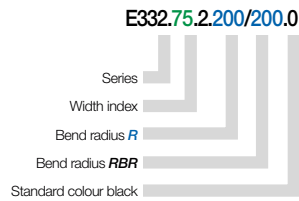
 Order example for complete e-chain® (1.0m), colour black, with mounting brackets:


e-chain® (1.0m)	Please indicate e-chain® length or number of links: 1.0m or 28 links	E333.75.200/200.0
+ Mounting brackets	1 set mounting bracket with strain relief	333.75.12PZ
Order text:	1m E333.75.200/200.0 + 333.75.12PZ	

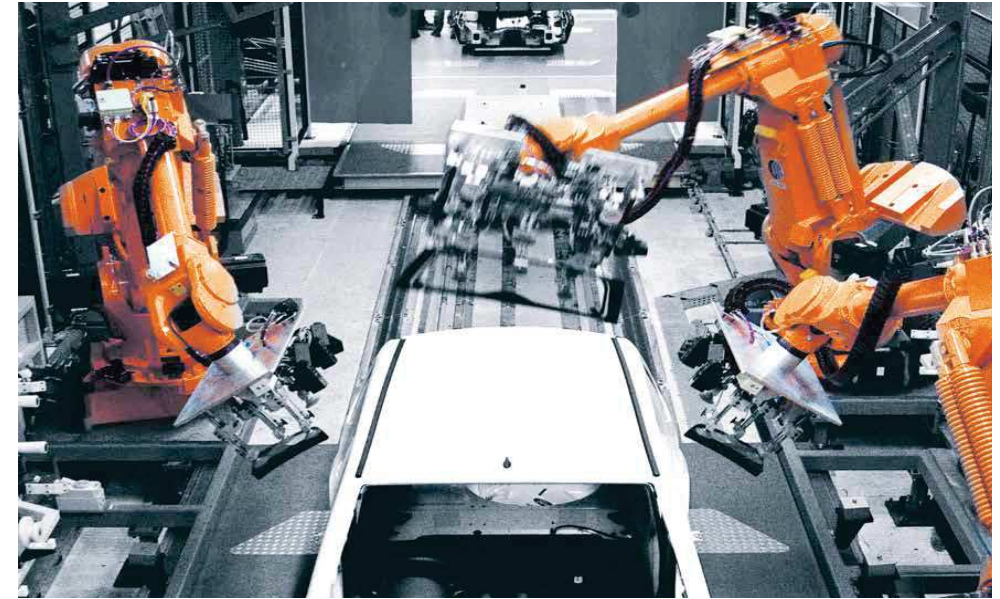
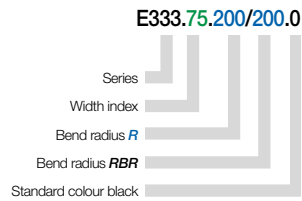
 Order key
Single-axis movement



 Order key
Double-axis movement



 Order key
Triple-axis movement



Robots with igus® easy triflex® e-chains® on an assembly line



igus® easy triflex® and E2 medium e-chain® in a production line



easy triflex® e-chains® can also be used for simple applications needing an aesthetic solution

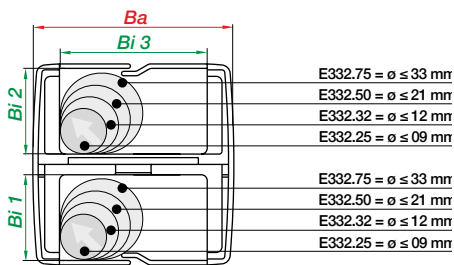
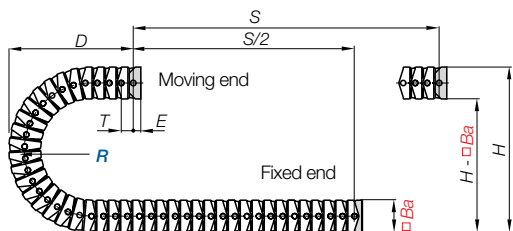


e-chains® | Series E332 "easy" design | Single-axis movement

Part No.	Bi1/Bi2	Bi3	Ba	R Available bend radii	Pitch	E332
e-chains®	[mm]	[mm]	[mm]	[mm]	[mm]	[kg/m]
E332.25.2 .R.0	13	25	34	048 075 100 125 150 175 200	14.5	≈ 0.70
E332.32.2 .R.0	17	32	50	075 100 125 150 200 250	25	≈ 0.90
E332.50.2 .R.0	26	50	68	100 125 150 200 250	30	≈ 1.40
E332.75.2 .R.0	38.5	75	96	140 175 200 250 300	36	≈ 2.35

Complete Part No. with required radius (R). Example: E332.75.2.200.0

Installation dimensions



E332.25.2	R	048	075	100	125	150	175	200
	H	130	185	235	285	335	385	435
D	095	125	150	175	200	225	250	
K	195	280	360	440	515	595	675	
E332.32.2	R	075	100	125	150	200	250	
	H	200	250	300	350	450	550	
D	130	155	180	205	255	305		
K	305	385	465	545	700	865		
E332.50.2	R	100	125	150	200	250		
	H	270	320	375	470	570		
D	195	220	245	295	345			
K	435	520	590	750	910			
E332.75.2	R	140	175	200	250	300		
	H	380	450	500	600	700		
D	240	275	300	350	400			
K	550	660	740	900	1,060			

E332.25.2.	E332.32.2.		
Ba [mm]	34	Ba [mm]	50
Pitch T [mm/link]	14.5	Pitch T [mm/link]	25
Dim. E [mm]	10	Dim. E [mm]	20
Links/m	69	Links/m	40
corresponds to [mm]	1,000.5	corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$		e-chain® length $L_K = S/2 + K$	
E332.50.2.	E332.75.2.		
Ba [mm]	68	Ba [mm]	96
Pitch T [mm/link]	30	Pitch T [mm/link]	36
Dim. E [mm]	25	Dim. E [mm]	25
Links/m	34	Links/m	28
corresponds to [mm]	1,020	corresponds to [mm]	1,008
e-chain® length $L_K = S/2 + K$		e-chain® length $L_K = S/2 + K$	



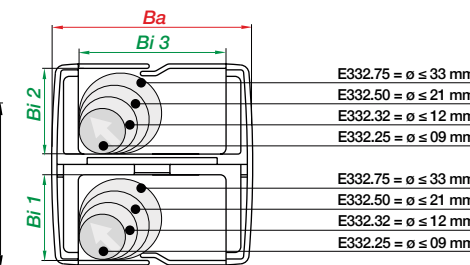
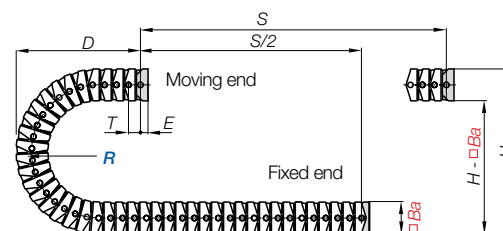
e-chains® | Series E332 "easy" design | Double-axis movement with RBR*

Part No.	Bi1/Bi2	Bi3	Ba	R Available bend radii	Pitch	E332
e-chains®	[mm]	[mm]	[mm]	[mm]	[mm]	[kg/m]
E332.25.2 .R/R.0	13	25	34	048 075 100 125 150 175 200	14.5	≈ 0.70
E332.32.2 .R/R.0	17	32	50	075 100 125 150 200 250	25	≈ 0.90
E332.50.2 .R/R.0	26	50	68	100 125 150 200 250	30	≈ 1.40
E332.75.2 .R/R.0	38.5	75	96	140 175 200 250 300	36	≈ 2.35

*RBR = Reverse Bend Radius

Complete Part No. with required radius (R). Example: E332.75.2.200/200.0

Installation dimensions



E332.25.2	R	048	075	100	125	150	175	200
	H	130	185	235	285	335	385	435
D	095	125	150	175	200	225	250	
K	195	280	360	440	515	595	675	
E332.32.2	R	075	100	125	150	200	250	
	H	200	250	300	350	450	550	
D	130	155	180	205	255	305		
K	305	385	465	545	700	865		
E332.50.2	R	100	125	150	200	250		
	H	270	320	375	470	570		
D	195	220	245	295	345			
K	435	520	590	750	910			
E332.75.2	R	140	175	200	250	300		
	H	380	450	500	600	700		
D	240	275	300	350	400			
K	550	660	740	900	1,060			

E332.25.2.	E332.32.2.		
Ba [mm]	34	Ba [mm]	50
Pitch T [mm/link]	14.5	Pitch T [mm/link]	25
Dim. E [mm]	10	Dim. E [mm]	20
Links/m	69	Links/m	40
corresponds to [mm]	1,000.5	corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$		e-chain® length $L_K = S/2 + K$	
E332.50.2.	E332.75.2.		
Ba [mm]	68	Ba [mm]	96
Pitch T [mm/link]	30	Pitch T [mm/link]	36
Dim. E [mm]	25	Dim. E [mm]	25
Links/m	34	Links/m	28
corresponds to [mm]	1,020	corresponds to [mm]	1,008
e-chain® length $L_K = S/2 + K$		e-chain® length $L_K = S/2 + K$	

Triple-axis movement



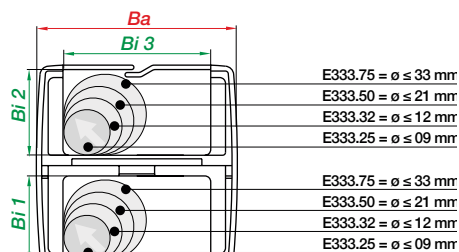
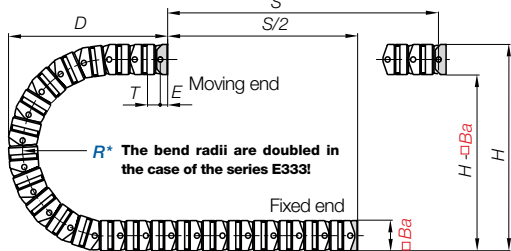
e-chains® | Series E333 "easy" design | Triple-axis movement with **RBR***

Part No.	Bi1/Bi2	Bi3	Ba	R Available bend radii	Pitch	E332
e-chains®	[mm]	[mm]	[mm]	[mm]	[mm]	[kg/m]
E333.25.R/R.0	13	25	34	048 075 100 125 150 175 200	14.5	≈ 0.70
E333.32.R/R.0	17	32	50	075 100 125 150 200 250	25	≈ 0.90
E333.50.R/R.0	26	50	68	100 125 150 200 250	30	≈ 1.40
E333.75.R/R.0	38.5	75	96	140 175 200 250 300	36	≈ 2.35

*RBR = Reverse Bend Radius The bend radii are doubled in the case of the series E333

Complete Part No. with required radius (R). Example: E333.75.200/200.0

Installation dimensions



E333.25	R	048	075	100	125	150	175	200
	H	230	335	435	535	635	735	835
D	145	200	250	300	350	400	450	
K	350	515	675	830	990	1,150	1,300	

E333.32	R	075	100	125	150	200	250
	H	350	450	550	650	850	1050
D	205	255	305	355	455	555	
K	545	700	860	1,020	1,300	1,605	

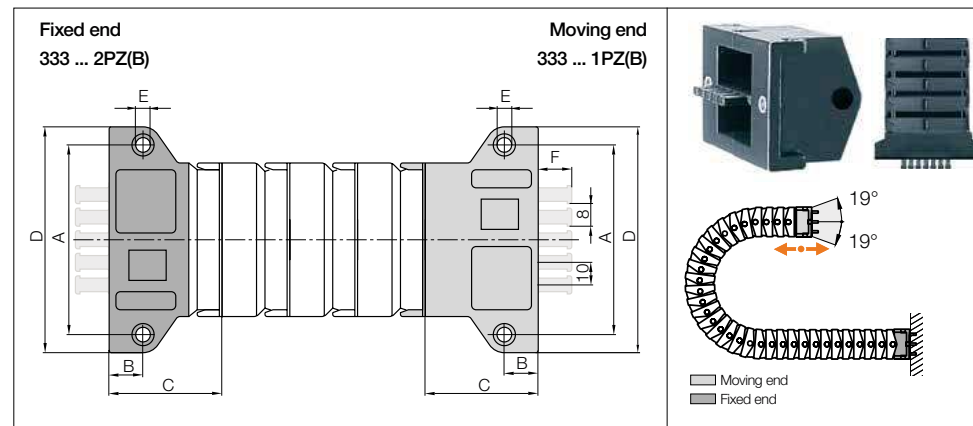
E333.50	R	100	125	150	200	250
	H	470	570	670	870	1070
D	295	345	395	495	595	
K	750	910	1,070	1,380	1,690	

E333.75	R	140	175	200	250	300
	H	660	800	900	1100	1300
D	380	450	500	600	700	
K	990	1,210	1,400	1,700	2,000	

E333.25	E333.32		
Ba [mm]	34	Ba [mm]	50
Pitch T [mm/link]	14.5	Pitch T [mm/link]	25
Dim. E [mm]	10	Dim. E [mm]	20
Links/m	69	Links/m	40
corresponds to [mm]	1,000.5	corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$		e-chain® length $L_K = S/2 + K$	

E333.50	E333.75		
Ba [mm]	68	Ba [mm]	96
Pitch T [mm/link]	30	Pitch T [mm/link]	36
Dim. E [mm]	25	Dim. E [mm]	25
Links/m	34	Links/m	28
corresponds to [mm]	1,020	corresponds to [mm]	1,008
e-chain® length $L_K = S/2 + K$		e-chain® length $L_K = S/2 + K$	

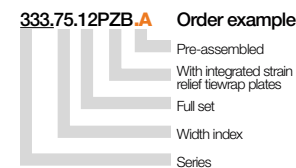
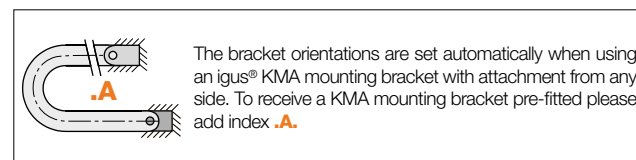
KMA mounting brackets | Attachment from any side | One end pivoting



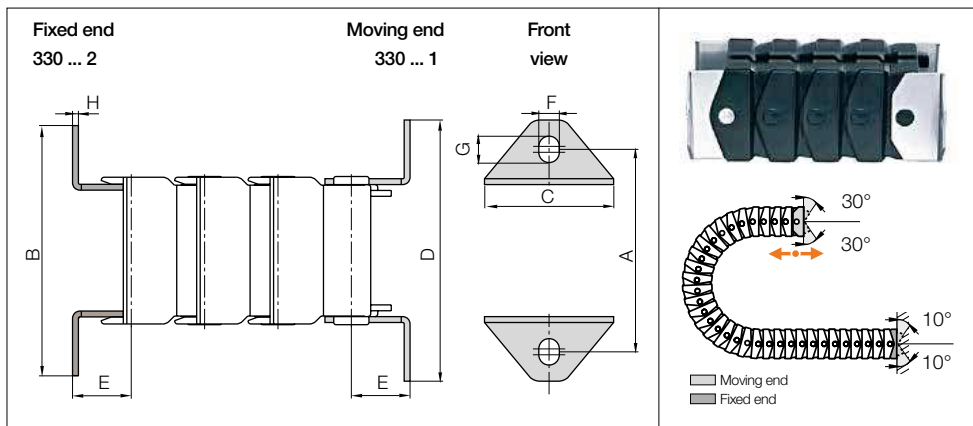
KMA mounting brackets | One end pivoting

Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Number of teeth
25.2 / 25. ▶	–	333.25.12PZ	43	7	22	52	4.5	–	–
32.2 / 32. ▶	333.32.12PZB	333.32.12PZ	66	15	46	82	6.5	15	3
50.2 / 50. ▶	333.50.12PZB	333.50.12PZ	84	15	50	100	6.5	15	5
75.2 / 75. ▶	333.75.12PZB	333.75.12PZ	109	15	55	125	6.5	15	7

Note series E333: the mounting brackets are only available for e-chains® with even number of chain links!



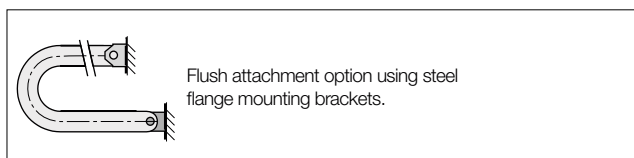
Strain relief e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392




Mounting brackets, flange, steel | Pivoting

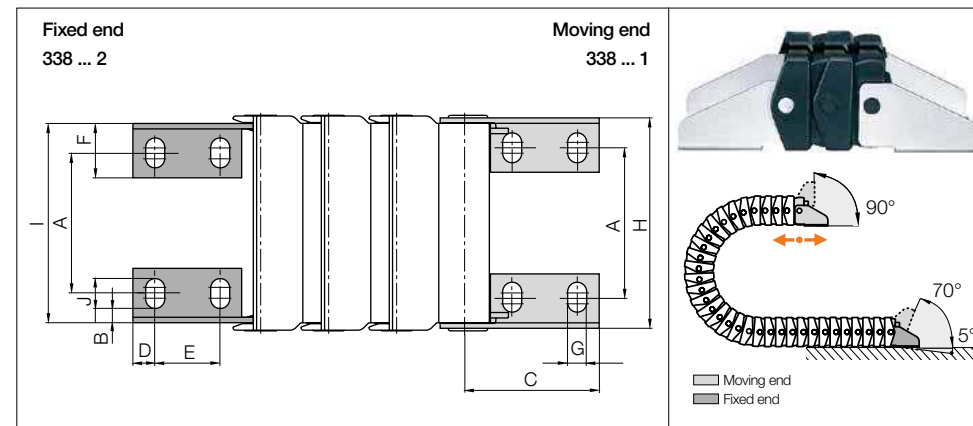
Width index	Part No. full set	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]
25.2 / 25. ▶	330.25.12	44	55	29	55	10.5	4.5	6.5	1.5
32.2 / 32. ▶	330.32.12	66	84	44	88	20	7	9	2
50.2 / 50. ▶	330.50.12	84	102	62	106	25	7	9	2
75.2 / 75. ▶	330.75.12	109	127	90	131	25	7	9	2

Note series E333: the mounting brackets are only available for e-chains® with even number of chain links!



330.75.12 Order example
 Full set
 Width index
 Series

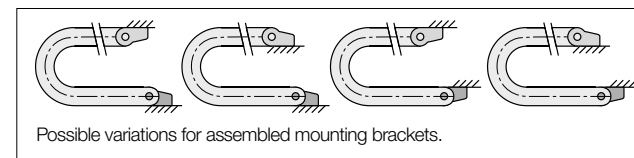
 **Strain relief** e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392



Mounting brackets, angled, steel | Pivoting

Width index	Part No. full set	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]
25.2 / 25. ▶	338.25.12	17	6.25	33	6	16	14	5.5	33.8	31	8.5
32.2 / 32. ▶	338.32.12	24	5.5	47	8	24	20	7	49	45	11
50.2 / 50. ▶	338.50.12	42	5.5	77	12	35	24	9	67	62	15
75.2 / 75. ▶	338.75.12	65	5.5	77	12	35	24	9	95	90	15

Note series E333: the mounting brackets are only available for e-chains® with even number of chain links!



338.75.12 Order example
 Full set
 Width index
 Series

 **Strain relief** e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392