



easy triflex®

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



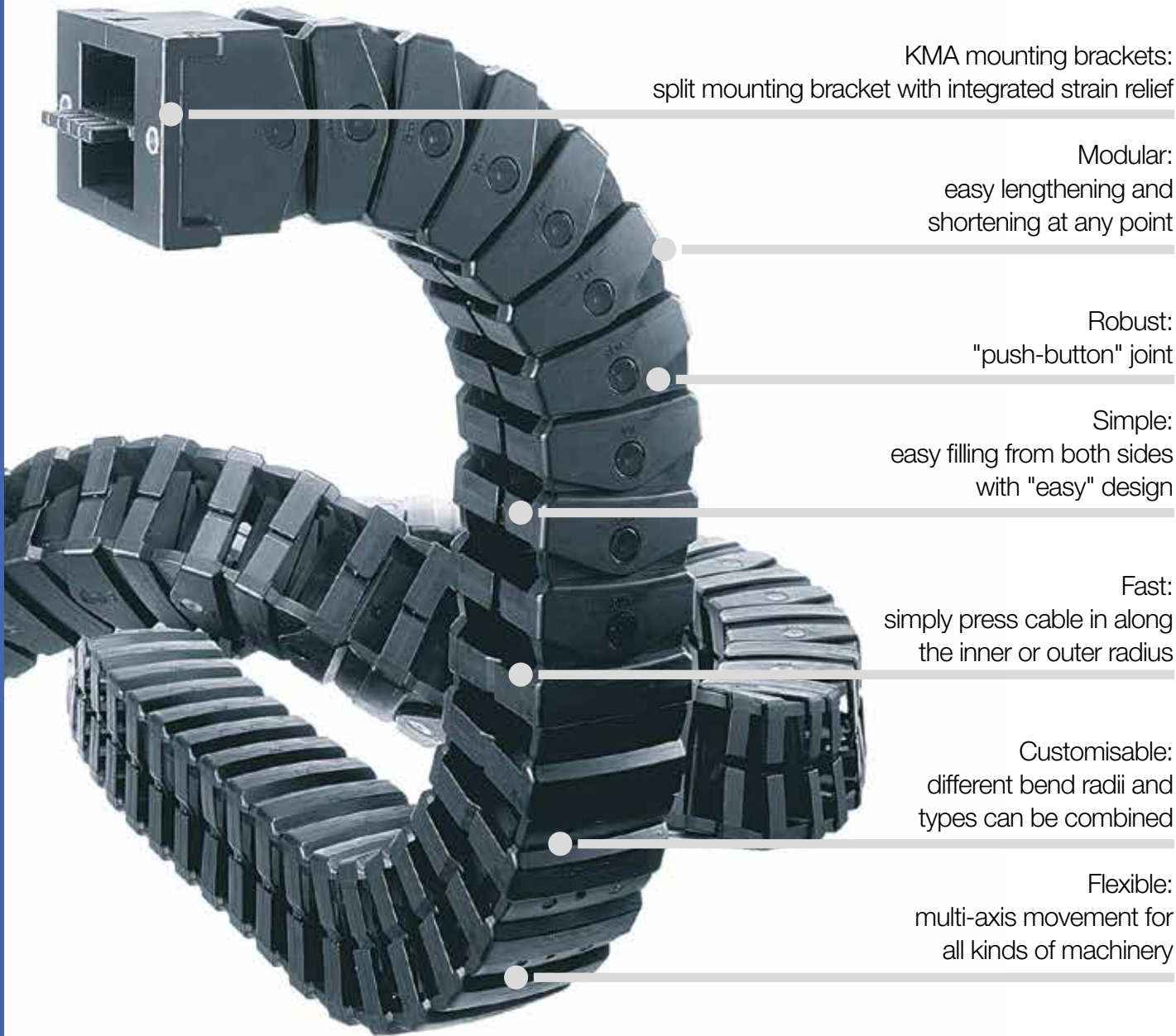
easy triflex® advantages:

- 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



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



UL94-V2
classification



iF product design award
2000 Series easy triflex®

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

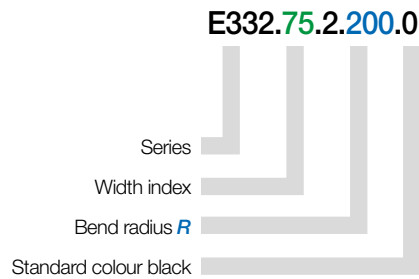
	Speed / acceleration	upon request
	Material - permitted temperature °C, igumid NB	-40°C / +120°C
	Flammability class, igumid NB	VDE 0304 IIC UL94-V2

Order example | Order key

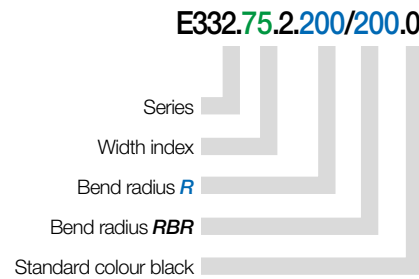
 Order example for complete e-chain® (1.0m), colour black, with mounting brackets:

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	

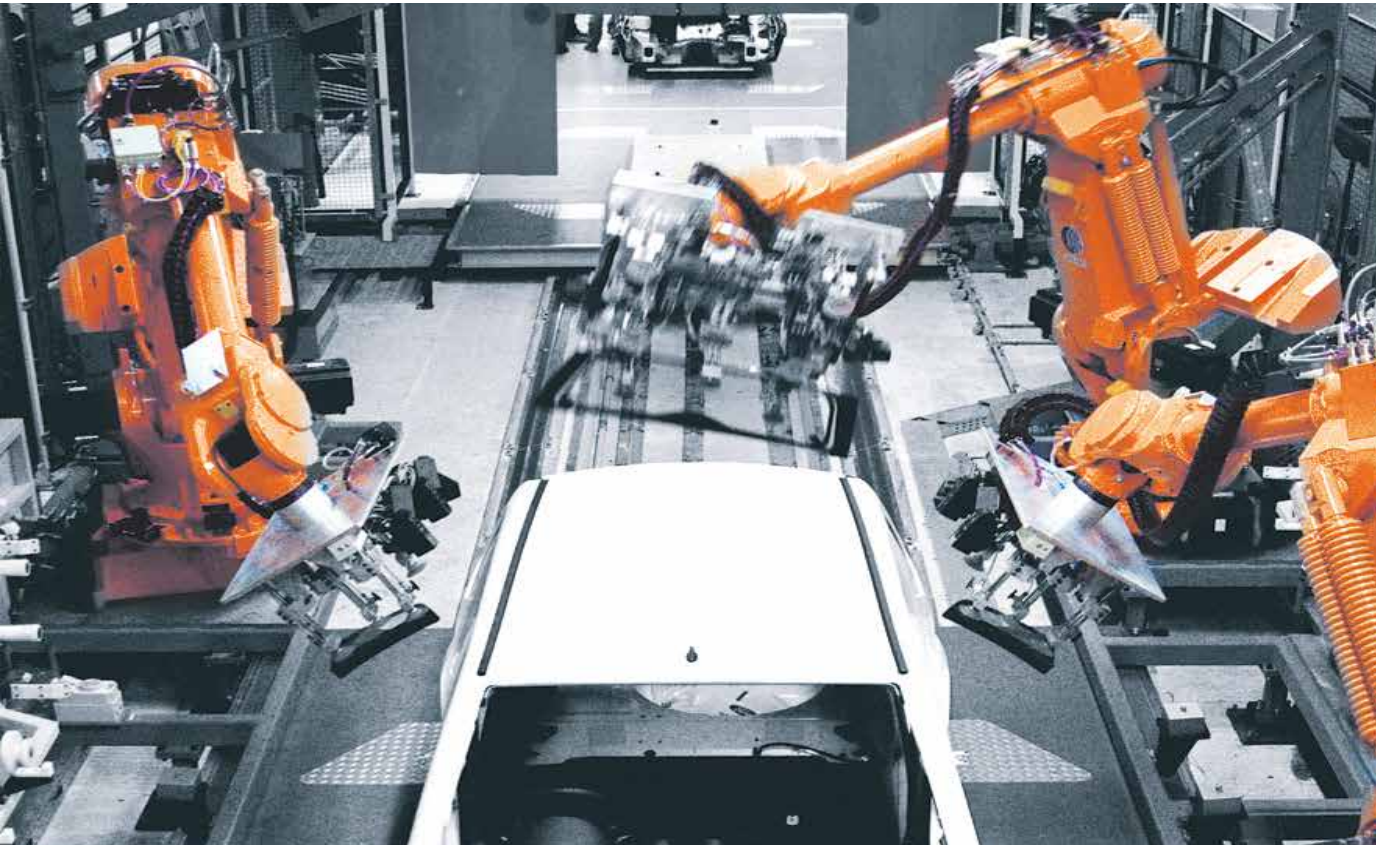
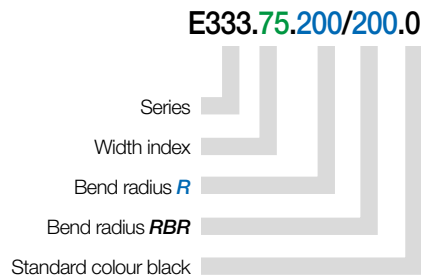
 Order key
Single-axis movement



 Order key
Double-axis movement



 Order key
Triple-axis movement



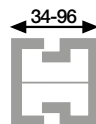
Robots with igus® easy triflex® e-chains® on an assembly line



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

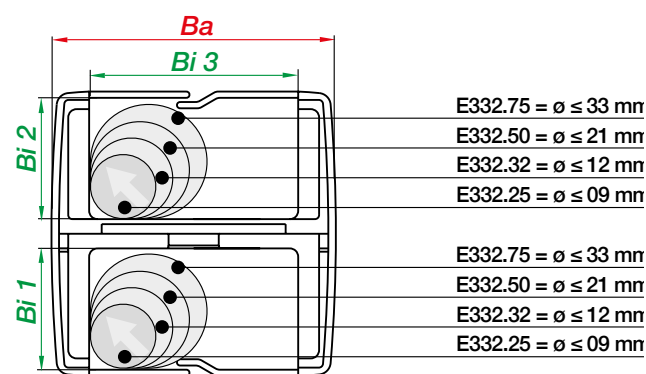
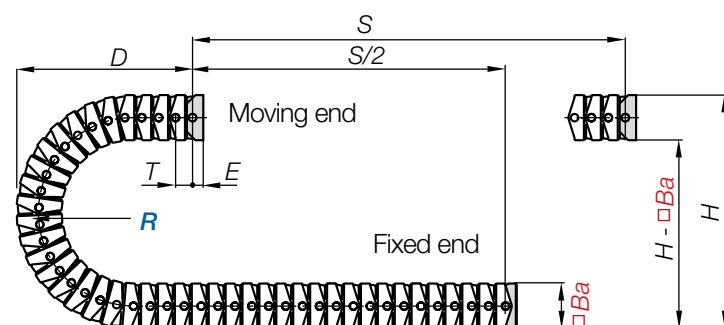


e-chains® | Series E332 "easy" design | Single-axis movement

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

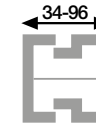
Installation dimensions



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

E332.25.2.		E332.32.2.	
<i>Ba</i> [mm]	34	<i>Ba</i> [mm]	50
Pitch <i>T</i> [mm/link]	14.5	Pitch <i>T</i> [mm/link]	25
Dim. <i>E</i> [mm]	10	Dim. <i>E</i> [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.	
<i>Ba</i> [mm]	68	<i>Ba</i> [mm]	96
Pitch <i>T</i> [mm/link]	30	Pitch <i>T</i> [mm/link]	36
Dim. <i>E</i> [mm]	25	Dim. <i>E</i> [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	$L_K = S/2 + K$

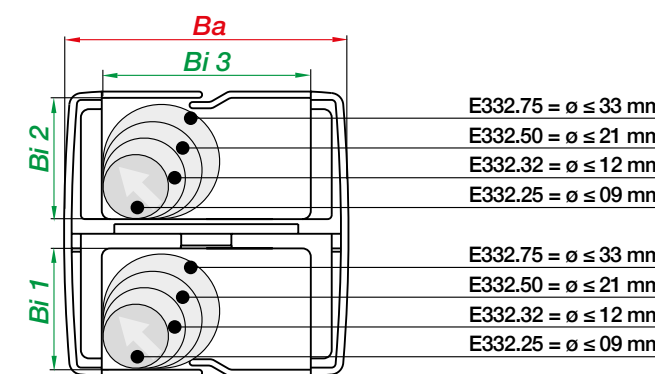
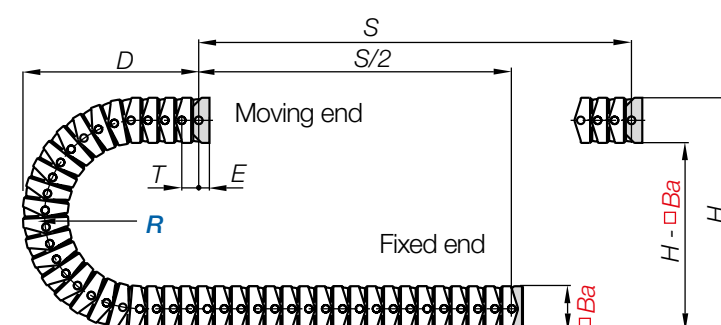
e-chains® | Series E332 "easy" design | Double-axis movement with *RBR**

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

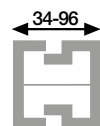
Installation dimensions



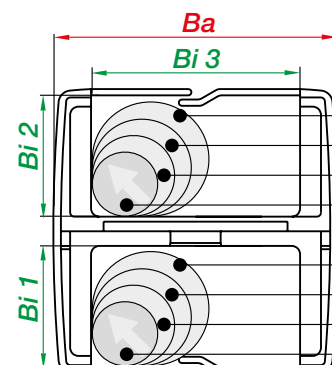
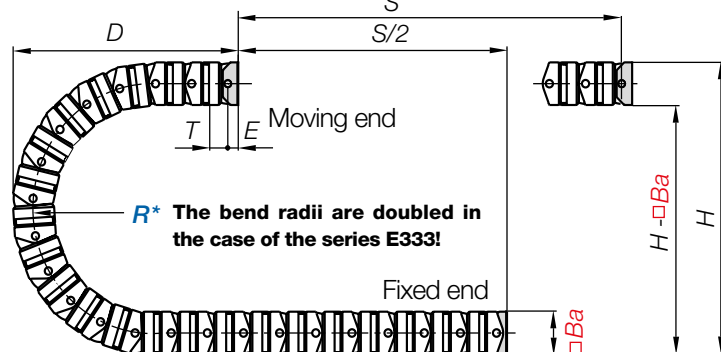
E332.25.2	<i>R</i>	048	075	100	125	150	175	200
	<i>H</i>	130	185	235	285	335	385	435
	<i>D</i>	095	125	150	175	200	225	250
	<i>K</i>	195	280	360	440	515	595	675
E332.32.2	<i>R</i>	075	100	125	150	200	250	
	<i>H</i>	200	250	300	350	450	550	
	<i>D</i>	130	155	180	205	255	305	
	<i>K</i>	305	385	465	545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

E332.25.2.		E332.32.2.	
<i>Ba</i> [mm]	34	<i>Ba</i> [mm]	50
Pitch <i>T</i> [mm/link]	14.5	Pitch <i>T</i> [mm/link]	25
Dim. <i>E</i> [mm]	10	Dim. <i>E</i> [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.	
<i>Ba</i> [mm]	68	<i>Ba</i> [mm]	96
Pitch <i>T</i> [mm/link]	30	Pitch <i>T</i> [mm/link]	36
Dim. <i>E</i> [mm]	25	Dim. <i>E</i> [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 E333 "easy" design | Triple-axis movement with *RBR**

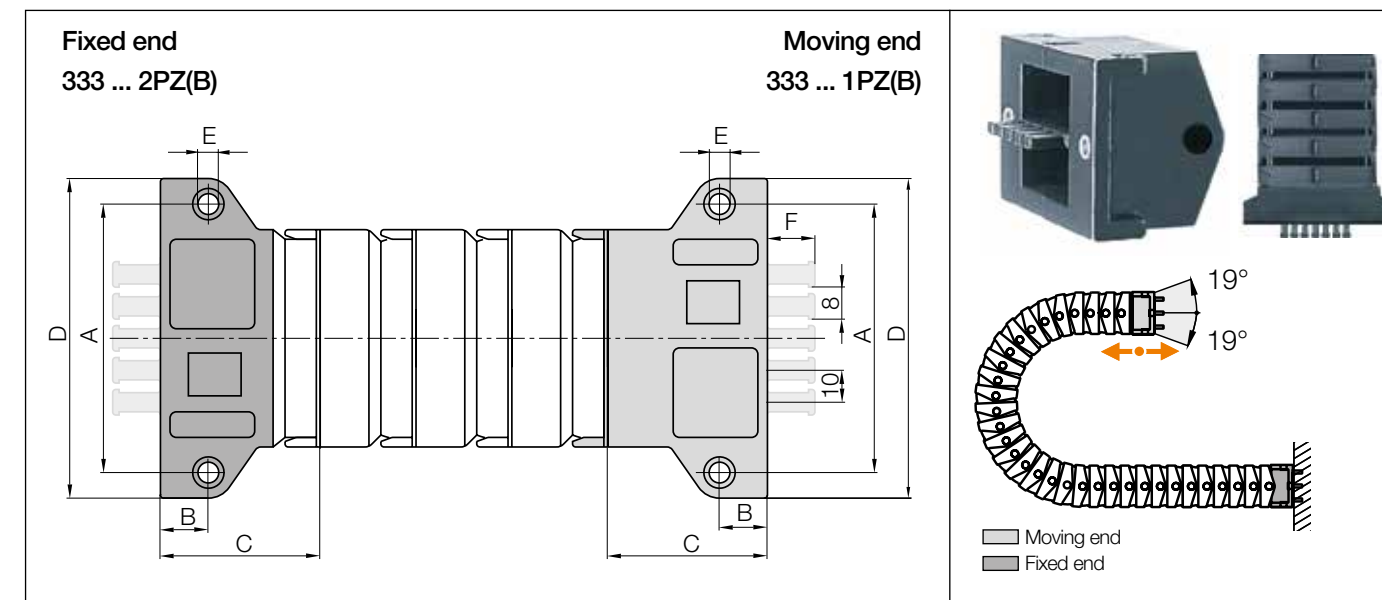
Part No.	Bi1/Bi2	Bi3	Ba	R Available bend radii								Pitch	E332
e-chains®	[mm]	[mm]	[mm]	[mm]								[mm]	[kg/m]
E333.25.R/R.0	13	25	34	048	075	100	125	150	175	200		14.5	≈ 0.70
E333.32.R/R.0	17	32	50	075	100	125	150	200	250			25	≈ 0.90
E333.50.R/R.0	26	50	68	100	125	150	200	250				30	≈ 1.40
E333.75.R/R.0	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 E333Complete Part No. with required radius (*R*). Example: E333.75.200/200.0Installation dimensions_SE333.75 = $\phi \leq 33$ mrr
E333.50 = $\phi \leq 21$ mrr
E333.32 = $\phi \leq 12$ mrr
E333.25 = $\phi \leq 09$ mrrE333.75 = $\phi \leq 33$ mrr
E333.50 = $\phi \leq 21$ mrr
E333.32 = $\phi \leq 12$ mrr
E333.25 = $\phi \leq 09$ mrr

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		

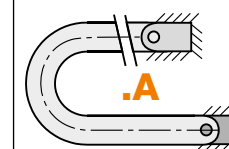
E333.25		E333.32	
Ba [mm]	34	Ba [mm]	50
Pitch <i>T</i> [mm/link]	14.5	Pitch <i>T</i> [mm/link]	25
Dim. <i>E</i> [mm]	10	Dim. <i>E</i> [mm]	20
Links/m	69	Links/m	40
corresponds to [mm]	1,000.5	corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$		e-chain® length $L_K = S/2 + K$	

E333.50		E333.75	
Ba [mm]	68	Ba [mm]	96
Pitch <i>T</i> [mm/link]	30	Pitch <i>T</i> [mm/link]	36
Dim. <i>E</i> [mm]	25	Dim. <i>E</i> [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 | One end pivoting

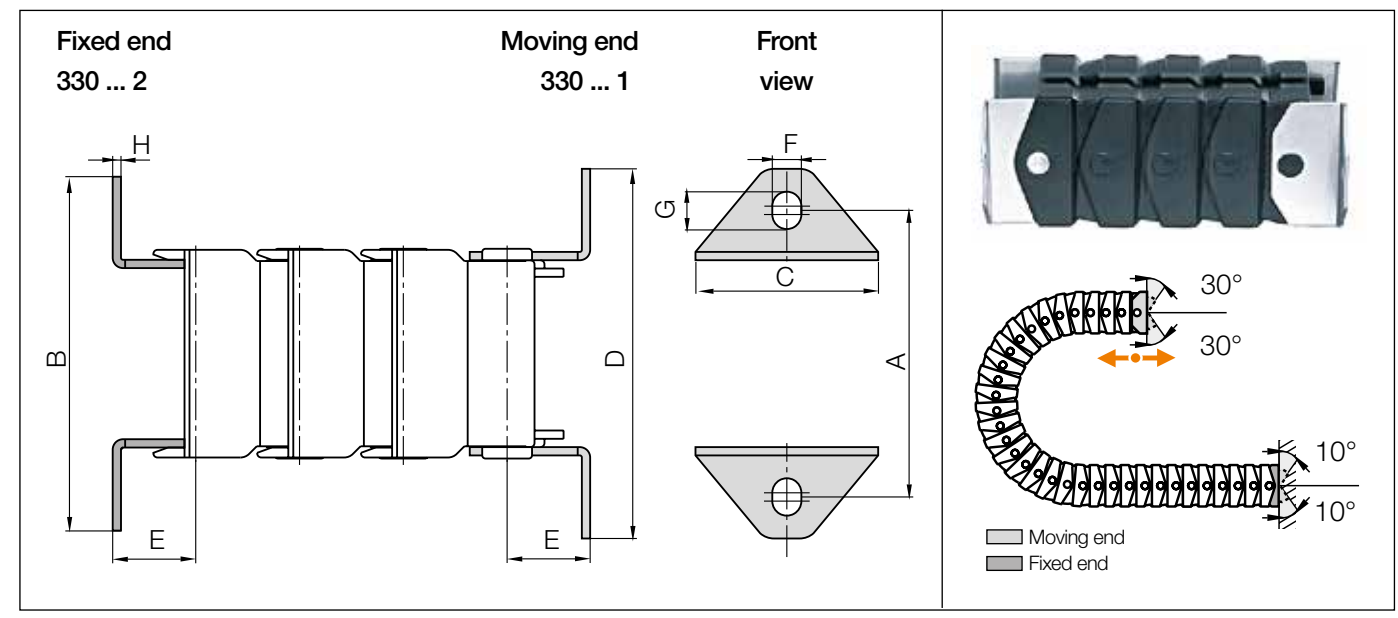
Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Number of teeth
25.2 / 25. ▶	–	333.25.12PZ	43	7	22	52	4.5	–	–
32.2 / 32. ▶	333.32.12PZB	333.32.12PZ	66	15	46	82	6.5	15	3
50.2 / 50. ▶	333.50.12PZB	333.50.12PZ	84	15	50	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!The bracket orientations are set automatically when using an igus® KMA mounting bracket with attachment from any side. To receive a KMA mounting bracket pre-fitted please add index **.A**.

333.75.12PZB.A	Order example
	Pre-assembled
	With integrated strain relief tiewrap plates
	Full set
	Width index
	Series



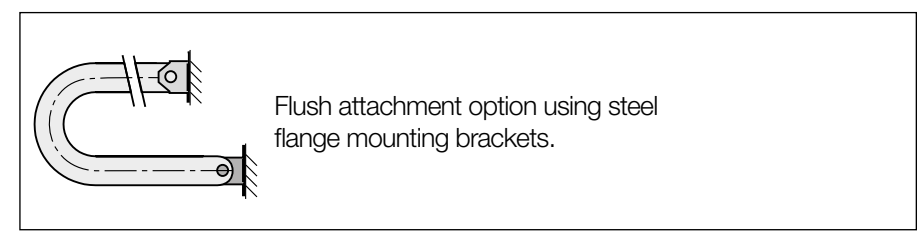
Strain relief e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392



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!



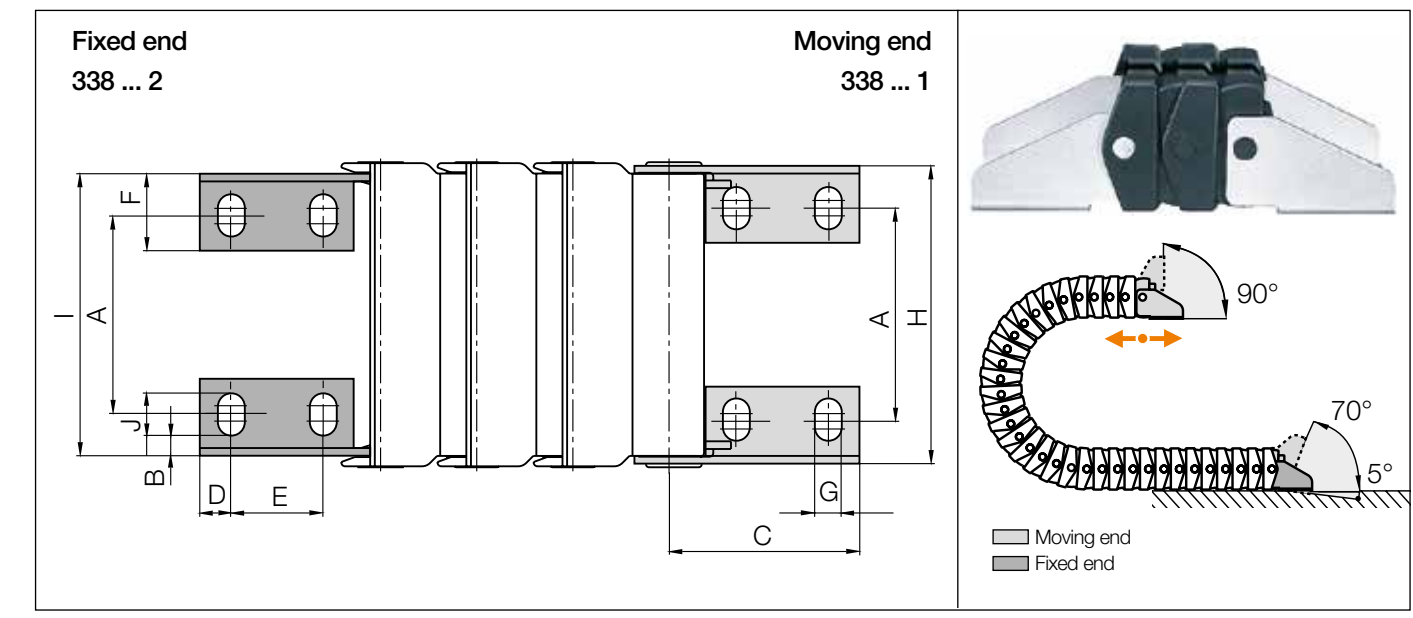
330.75.12 **Order example**

Full set

Width index

Series

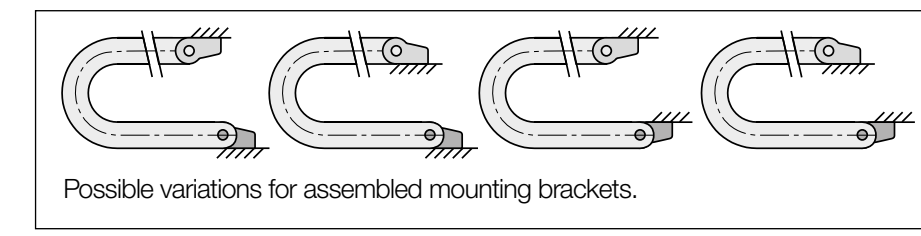
 **Strain relief** e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392



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