

igubal® Clevis Joints



High tensile strength

Vibration-dampening

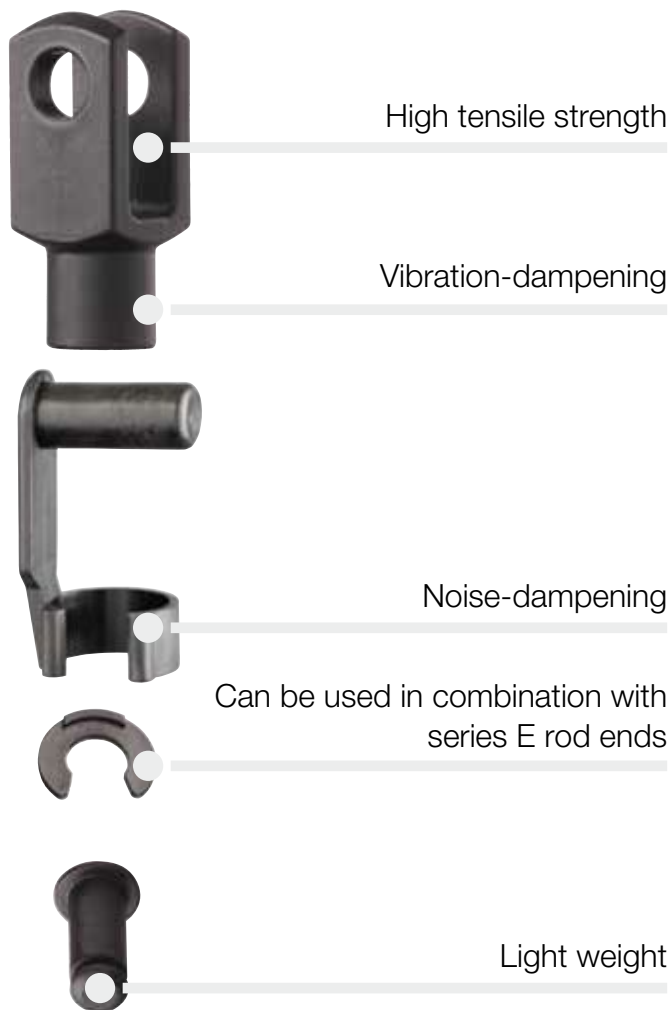
Noise-dampening

Can be used in combination with series E rod ends

Light weight

igubal® Clevis Joints

igubal® clevis joints are all made of igumid G to DIN 71752, which can be used in combination with series E rod ends. Available components are clevis joint, clevis pin and clip or as an alternative, spring-loaded pin.



When to use it?

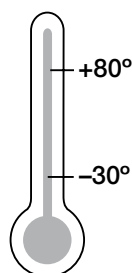
- If high stiffness is requested
- If corrosion resistance is required
- If no lubrication is to be used
- To save weight
- If maintenance-free, dry-running is required
- If simple assembly is to be realized
- In combination with pneumatic cylinders and gas pressure springs



When not to use it?

- If temperatures are higher than +200 °C
- If dimensions above 20 mm are necessary

Temperature



Product range

4 types
Ø 4–20 mm



igubal® Clevis Joints | Application Examples



Typical sectors of industry and application areas

- Food industry ● Packaging
- Heavy Duty ● Automotive
- Disposal engineering ● Automation etc.

Improve technology and reduce costs –
110 exciting examples online

► www.igus.eu/igubal-applications



► www.igus.eu/food



► www.igus-packaging.eu



► www.igus.eu/traffic



Pneumatic cylinder



GERM/GELM
Series E
Clevis joint – Standard version

► from page 666



GERMK/GELMK
Series E
Clevis joint with pin and circlip

► page 668



GERMF/GELMF
Series E
Clevis joint with spring loaded pins

► page 669



GERMKE/GELMKE
Series E
Clevis joint combination

► page 670



GERMFE/GELMFE
Series E
Clevis joint combination

► page 671

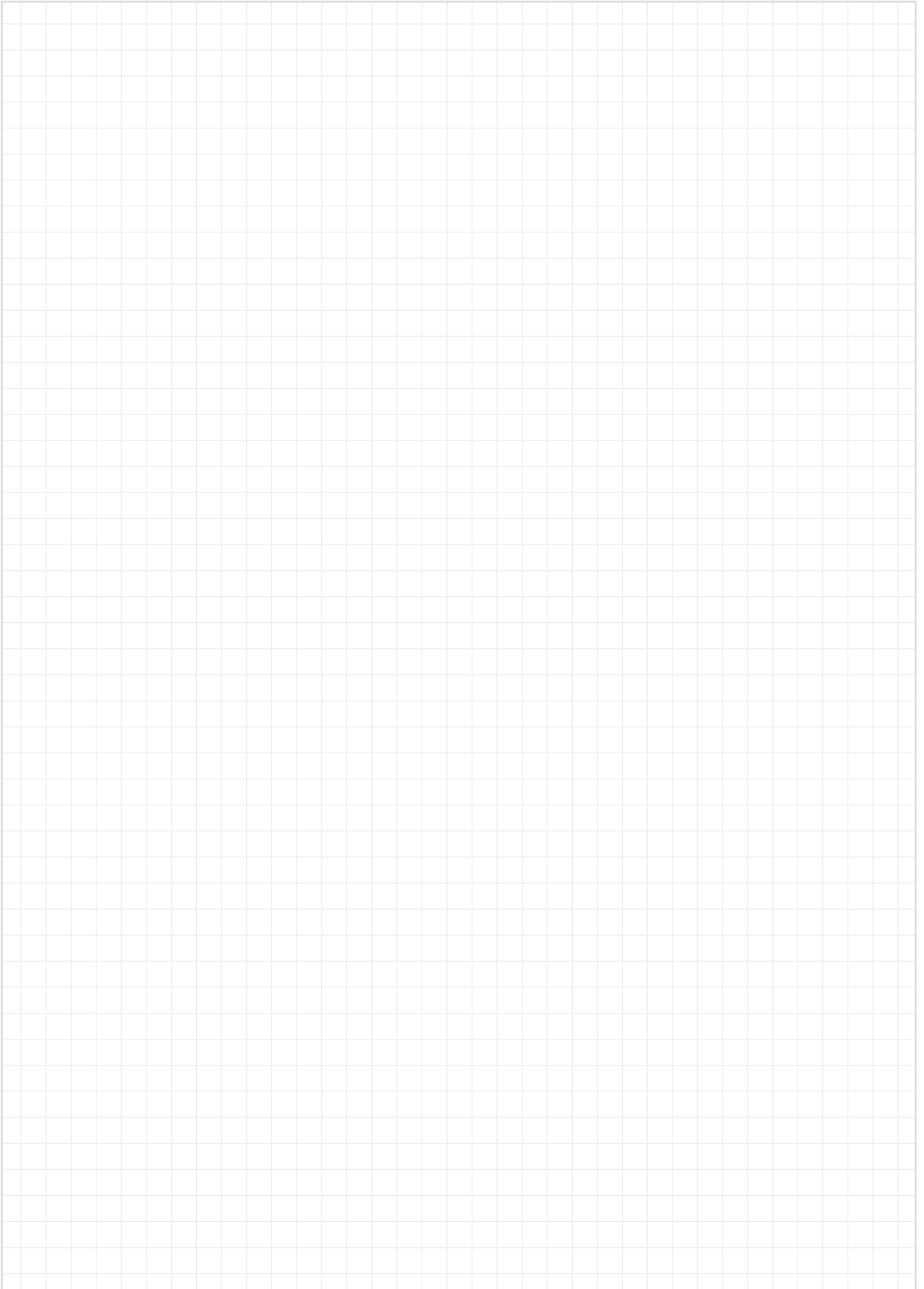


GEFM – Spring-loaded pin
GBM – Clevis pin
GSR – Circlip

► page 672–673

Detectable clevis joint ► from page 735

My Sketches



Clevis joint: GERM and GELM



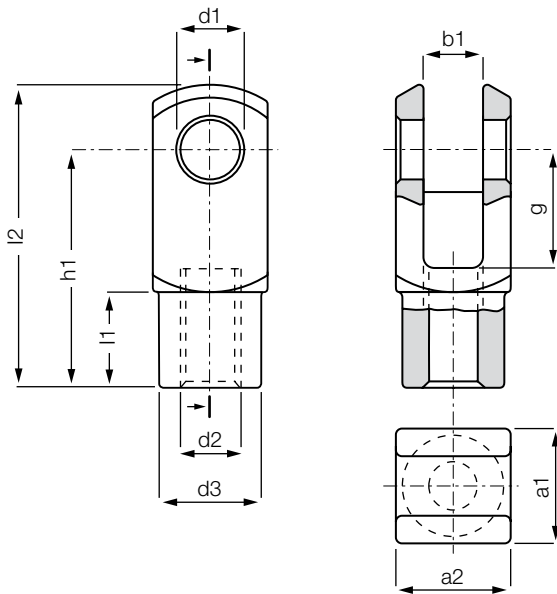
- Light weight
- High strength under impact loads
- Universal corrosion resistance
- High tensile strength
- Can be used in combination with series E rod ends
- Vibration-dampening
- Noise-dampening
- Available in left- (GELM) and right-hand-thread (GERM)

Technical Data

Part number		Max. static tensile strength		Max. static radial load		Max. torque strength	Weight
		Short term	Long term	Short term	Long term		
Right-hand thread	Left-hand thread	[N]	[N]	[N]	[N]	[Nm]	[g]
GERM-04 M3.5	GELM-04 M3.5	650	325	250	125	0.4	0.9
GERM-04	GELM-04	650	325	250	125	0.4	0.9
GERM-05 DIN M4	GELM-05 DIN M4	1,000	500	250	125	0.4	1.5
GERM-05 DIN M5	GELM-05 DIN M5	1,000	500	250	125	0.5	1.5
GERM-05	GELM-05	1,200	600	250	125	0.5	2.7
GERM-05 DIN M5 LS*	GELM-05 DIN M5 LS*	1,000	500	130	65	0.5	2.3
GERM-06	GELM-06	1,400	700	300	150	1.5	2.5
GERM-06 LS*	GELM-06 LS*	1,400	700	130	65	1.5	3.6
GERM-08	GELM-08	2,700	1,350	650	325	5	6.3
GERM-10	GELM-10	4,700	2,350	800	400	15	13.2
GERM-10 F	GELM-10 F	4,700	2,350	800	400	6	13.2
GERM-12	GELM-12	5,700	2,850	900	450	20	20.2
GERM-12 F	GELM-12 F	5,700	2,850	900	450	15	20.2
GERM-14	GELM-14	6,600	3,300	1,000	500	25	29.9
GERM-14 F	GELM-14 F	6,600	3,300	1,000	500	20	29.9
GERM-15	GELM-15	3,200	1,600	1,000	500	25	30
GERM-16	GELM-16	7,500	3,750	1,200	600	30	49.9
GERM-16 F	GELM-16 F	7,500	3,750	1,200	600	27.5	49.9
GERM-17	GELM-17	3,600	1,800	1,200	600	30	50
GERM-17 F	GELM-17 F	3,600	1,800	1,200	600	27.5	50
GERM-20	GELM-20	9,500	4,750	3,000	1,500	60	105
GERM-20 M20	GELM-20 M20	9,500	4,750	3,000	1,500	80	105

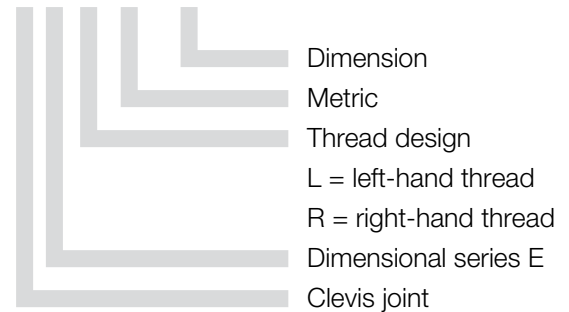
* LS = longer shaft

Clevis joint: GERM and GELM



Order key

GE...M-04



Material:

Housing: igumid G ► page 1127

Dimensions [mm]

Part number		d1	g	a1	a2	b1	d2	d3	l2	h1	l1
		H9	h11	+0.3	+0.3	B13	Thread tolerance 6H	+0.3	+0.5	+0.3	+0.2
Right-hand thread	Left-hand thread			-0.16	-0.16			-0.3	-0.5	-0.3	-0.2
GERM-04 M3.5	GELM-04 M3.5	4	8	8	8	4	M3.5	8.0	21.0	16.0	6.0
GERM-04	GELM-04	4	8	8	8	4	M04	8.0	21.0	16.0	6.0
GERM-05 DIN M4	GELM-05 DIN M4	5	10	10	10	5	M04	9.0	24.5	20.0	7.5
GERM-05 DIN M5	GELM-05 DIN M5	5	10	10	10	5	M05	9.0	24.5	20.0	7.5
GERM-05	GELM-05	5	12	12	12	6	M05	10.0	31.0	24.0	9.0
GERM-05 DIN M5 LS*	GELM-05 DIN M5 LS*	5	20	10	10	5	M05	9.0	36.0	30.0	7.5
GERM-06	GELM-06	6	12	12	12	6	M06	10.0	31.0	24.0	9.0
GERM-06 LS*	GELM-06 LS*	6	24	12	12	6	M06	10.0	43.0	36.0	9.0
GERM-08	GELM-08	8	16	16	16	8	M08	14.0	42.0	32.0	12.0
GERM-10	GELM-10	10	20	20	20	10	M10	18.0	52.0	40.0	15.0
GERM-10 F	GELM-10 F	10	20	20	20	10	M10 x 1.25	18.0	51.3	40.0	15.0
GERM-12	GELM-12	12	24	24	24	12	M12	20.0	61.3	48.0	18.0
GERM-12 F	GELM-12 F	12	24	24	24	12	M12 x 1.25	20.0	61.3	48.0	18.0
GERM-14	GELM-14	14	28	27	27	14	M14	24.0	71.3	56.0	22.5
GERM-14 F	GELM-14 F	14	28	27	27	14	M14 x 1.25	24.0	71.3	56.0	22.5
GERM-15	GELM-15	15	28	27	27	14	M15	24.0	71.3	56.0	22.5
GERM-16	GELM-16	16	32	32	32	16	M16	26.0	81.9	64.0	24.0
GERM-16 F	GELM-16 F	16	32	32	32	16	M16 x 1.5	26.0	81.9	64.0	24.0
GERM-17	GELM-17	17	32	32	32	16	M17	26.0	83.0	64.0	24.0
GERM-17 F	GELM-17 F	17	32	32	32	16	M17 x 1.5	26.0	83.0	64.0	24.0
GERM-20	GELM-20	20	40	40	40	20	M20 x 1.5	34.0	105.0	80.0	30.0
GERM-20 M20	GELM-20 M20	20	40	40	40	20	M20 x 2.5	34.0	105.0	80.0	30.0

* LS = longer shaft



delivery from stock
time



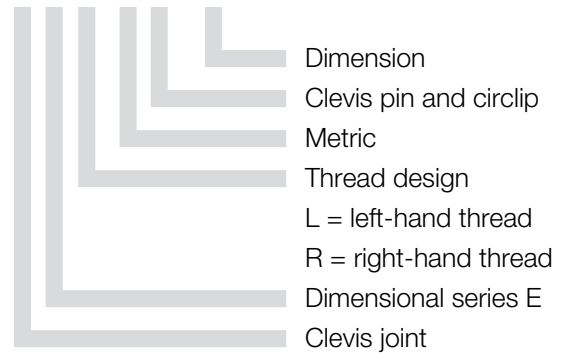
prices price list online
www.igus.eu/eu/germ

Clevis joints with clevis pin and circlip: GERMK and GELMK



Order key

GE...MK-04



- Light weight
- Universal corrosion resistance
- High tensile strength
- Can be used in combination with series E rod ends



Material:

Housing: **igumid G** ► page 1127

Technical Data

Part number		Max. static tensile strength		Max. static radial load		Weight [g]
		Short term [N]	Long term [N]	Short term [N]	Long term [N]	
Right-hand thread	Left-hand thread	[N]	[N]	[N]	[N]	[g]
GERMK-04 M3.5	GELMK-04 M3.5	500	250	250	125	1.3
GERMK-04	GELMK-04	500	250	250	125	1.3
GERMK-05 DIN M4	GELMK-05 DIN M4	800	400	250	125	2.1
GERMK-05 DIN M5	GELMK-05 DIN M5	800	400	250	125	2.1
GERMK-05	GELMK-05	900	450	250	125	3.3
GERMK-05 DIN M5 LS*	GELMK-05 DIN M5 LS*	800	400	130	65	2.9
GERMK-06	GELMK-06	1,300	650	300	150	3.3
GERMK-06 LS*	GELMK-06 LS*	1,300	650	130	65	4.4
GERMK-08	GELMK-08	2,100	1,050	650	325	7.9
GERMK-10	GELMK-10	3,000	1,500	800	400	16.4
GERMK-10 F	GELMK-10 F	3,000	1,500	800	400	16.4
GERMK-12	GELMK-12	3,500	1,750	900	450	25.3
GERMK-12 F	GELMK-12 F	3,500	1,750	900	450	25.3
GERMK-14	GELMK-14	6,100	3,050	1,000	500	31.2
GERMK-15	GELMK-15	2,800	1,400	1,000	500	38.9
GERMK-16	GELMK-16	7,000	3,500	1,200	600	60.8
GERMK-16 F	GELMK-16 F	7,000	3,500	1,200	600	60.8
GERMK-17	GELMK-17	3,600	1,800	1,200	600	62.3
GERMK-17 F	GELMK-17 F	3,600	1,800	1,200	600	62.3
GERMK-20	GELMK-20	9,000	4,500	3,000	1,500	125.2
GERMK-20 M20	GELMK-20 M20	9,000	4,500	3,000	1,500	125.2

* LS = longer shaft



Single components: clevis pin

GBM and circlip GSR

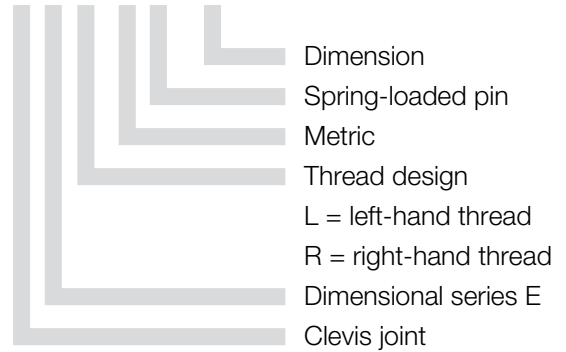
► page 673

Clevis joints with spring-loaded pin: GERMF and GELMF



Order key

GE...MF-04



- Single piece design
- Easy to assemble
- Easy assembly also at hard to reach locations
- Can be used in combination with series E rod ends
- Corrosion-resistant and lightweight



Material:

Housing: **igumid G** ► page 1127

Technical Data

Part number		Max. static tensile strength		Max. static radial load		Weight
		Short term	Long term	Short term	Long term	
Right-hand thread	Left-hand thread	[N]	[N]	[N]	[N]	[g]
GERMF-04 M3.5	GELMF-04 M3.5	500	250	250	125	1.3
GERMF-04	GELMF-04	500	250	250	125	1.3
GERMF-05 DIN M4	GELMF-05 DIN M4	800	400	250	125	2.3
GERMF-05 DIN M5	GELMF-05 DIN M5	800	400	250	125	2.3
GERMF-05 DIN M5 LS*	GELMF-05 DIN M5 LS*	800	400	250	125	2.3
GERMF-05	GELMF-05	900	450	250	125	3.8
GERMF-06	GELMF-06	1,300	650	300	150	3.9
GERMF-06 LS*	GELMF-06 LS*	1,300	650	130	65	3.9
GERMF-08	GELMF-08	2,100	1,050	650	325	9.1
GERMF-10	GELMF-10	3,000	1,500	800	400	18.2
GERMF-10 F	GELMF-10 F	3,000	1,500	800	400	18.2
GERMF-12	GELMF-12	3,500	1,750	900	450	28.6
GERMF-12 F	GELMF-12 F	3,500	1,750	900	450	28.6
GERMF-16	GELMF-16	7,000	3,500	1,200	600	61.8
GERMF-16 F	GELMF-16 F	7,000	3,500	1,200	600	61.8

* LS = longer shaft



Single components: spring-loaded pins GEFM

► page 672



delivery from stock
time



prices price list online
www.igus.eu/eu/germf

Clevis joints combination: GERMKE and GELMKE



Order key

GE...MKE-05



Dimension
With clevis pin, circlip
and rod end
Metric
Thread design
L = left-hand thread
R = right-hand thread
Dimensional series E
Clevis joint

- Light weight
- Universal corrosion resistance
- High tensile strength
- Can be used in combination with series E rod ends



Material:
igumid G ► page 1127

Technical Data

Part number		Max. static tensile strength		Max. static radial load		Weight
		Short term	Long term	Short term	Long term	
Right-hand thread	Left-hand thread	[N]	[N]	[N]	[N]	[g]
GERMKE-05	GELMKE-05	900	450	150	75	6.4
GERMKE-06	GELMKE-06	1.300	650	200	100	7.3
GERMKE-08	GELMKE-08	2.000	1.000	450	225	14.6
GERMKE-10	GELMKE-10	2.300	1.150	500	250	27.1
GERMKE-10 F	GELMKE-10 F	2.300	1.150	500	250	27.1
GERMKE-12	GELMKE-12	3.300	1.650	550	275	42.7
GERMKE-12 F	GELMKE-12 F	3.300	1.650	550	275	42.7
GERMKE-15	GELMKE-15	2.800	1.400	800	400	68.4
GERMKE-16	GELMKE-16	5.000	2.500	850	425	86.9
GERMKE-16 F	GELMKE-16 F	5.000	2.500	850	425	86.9
GERMKE-17	GELMKE-17	3.600	1.800	1.100	550	98.3
GERMKE-17 F	GELMKE-17 F	3.600	1.800	1.100	550	98.3
GERMKE-20	GELMKE-20	7.200	3.600	1.800	900	175.2
GERMKE-20 M20	GELMKE-20 M20	7.200	3.600	1.800	900	175.2

Clevis joints with spring-loaded pin, can be used in combination with series E rod ends, EBRM and EARM ► page 644–647

delivery from stock
time

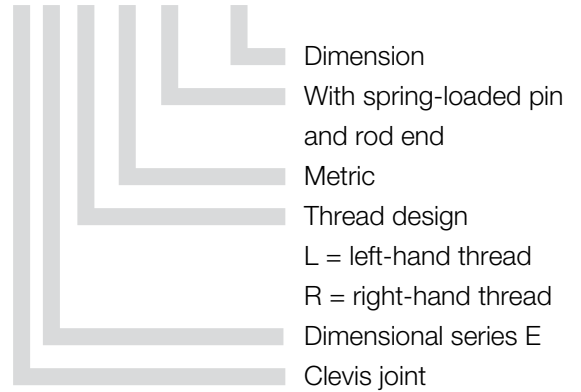
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Clevis joints combination: GERMFE and GELMFE



Order key

GE...MFE-05



Material:
igumid G ► page 1127

Technical Data

Part number		Max. static tensile strength		Max. static radial load		Weight [g]
		Short term [N]	Long term [N]	Short term [N]	Long term [N]	
Right-hand thread	Left-hand thread					
GERMFE-05	GELMFE-05	900	450	150	75	7.0
GERMFE-06	GELMFE-06	1,300	650	200	100	7.9
GERMFE-08	GELMFE-08	2,000	1,000	450	225	15.9
GERMFE-10	GELMFE-10	2,300	1,150	500	250	29.2
GERMFE-10 F	GELMFE-10 F	2,300	1,150	500	250	29.2
GERMFE-12	GELMFE-12	3,300	1,650	550	275	46.0
GERMFE-12 F	GELMFE-12 F	3,300	1,650	550	275	46.0
GERMFE-16	GELMFE-16	5,000	2,500	850	425	94.4
GERMFE-16 F	GELMFE-16 F	5,000	2,500	850	425	94.4

Clevis joints with spring-loaded pin, can be used in combination with series E rod ends, EBRM and EARM

► page 644–647

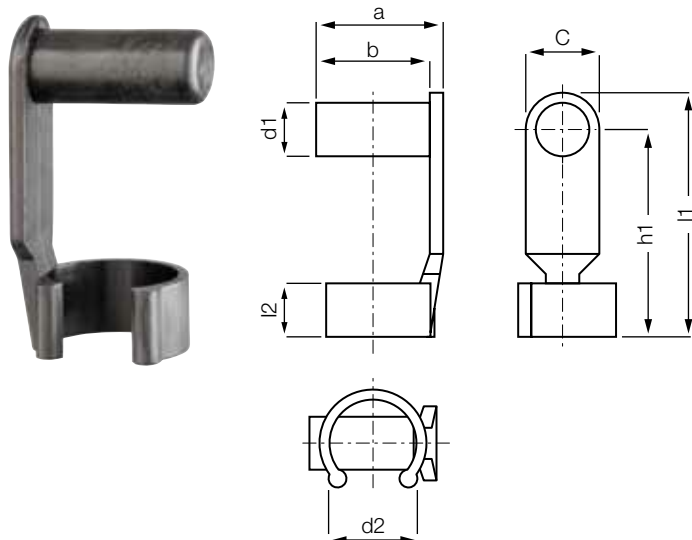


delivery from stock
time



prices price list online
www.igus.eu/eu/germfe

Spring-loaded pin: GEFM



Material:
igumid G ► page 1127

Dimensions [mm]

Part number	d1 h11	d2	a	b	C	l1 ±0.5	h1	l2	Weight [g]
GEFM-04	4	8	9.5	10.5	8	19	15	4.5	0.5
GEFM-05 DIN	5	9	12	13.5	8	23	19	5.5	0.8
GEFM-05 DIN M5 LS*	5	9	12	13.5	8	33	29	5.5	1.0
GEFM-05	5	10	14	15.5	8	27	23	6.5	1.1
GEFM-06 LS*	6	10	14	15.5	8	39	35	6.5	1.0
GEFM-06	6	10	14	15.5	8	27	23	6.5	1.2
GEFM-08	8	14	19	21.0	11	35.5	30	8.0	2.8
GEFM-10	10	18	23	25.5	14	45	38	10.0	5.0
GEFM-12	12	20	28	31.0	16	53	45	12.0	8.3
GEFM-16	16	26	36	40.0	22	73	62	16.0	18.3

* LS = longer shaft



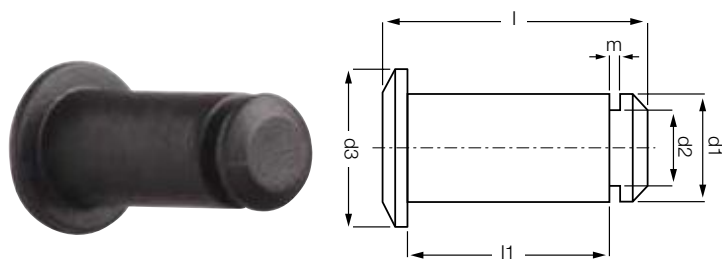
delivery from stock
time



prices price list online
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igubal® Clevis Joints | Product Range

Clevis pin: GBM

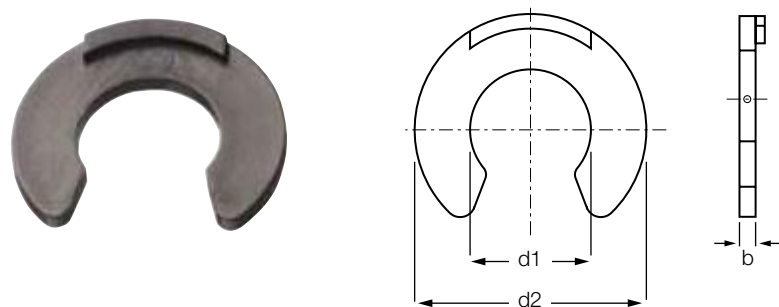


Material:
igumid G ► page 1127

Dimensions [mm]

Part number	d1 h11	d2	d3	l	l1	m	Clip	Weight [g]
GBM-04	4	3.2	7	12.5	8	1.05	GSR-04	0.3
GBM-05	5	4	8	16.5	12	1.15	GSR-06	0.5
GBM-05 DIN	5	4	8	14.5	10	1.15	GSR-06	0.5
GBM-06	6	4	9	16.5	12	1.15	GSR-06	0.7
GBM-08	8	5	12	21.5	16	1.15	GSR-08	1.5
GBM-10	10	7	15	27	20	1.35	GSR-10	3.0
GBM-12	12	9	18	31.5	24	1.5	GSR-12	4.8
GBM-14	14	12	22	36	27	1.7	GSR-16	5.7
GBM-15	15	12	23	36	27	1.7	GSR-16	8.3
GBM-16	16	12	24	42	32	1.7	GSR-16	10.4
GBM-17	17	12	25	42	32	1.7	GSR-16	12.3
GBM-20	20	15	30	51	40	2.0	GSR-20	19.2


Circlip: GSR



Material:
POM ► page 1128

Dimensions [mm]

Part number	d1	d2	b	Weight [g]
GSR-04	3.2	7	1.0	0.05
GSR-06	4	9	1.1	0.06
GSR-08	5	11	1.1	0.12
GSR-10	7	14	1.3	0.16
GSR-12	9	18.5	1.4	0.31
GSR-16	12	23	1.6	0.58
GSR-20	15	28	1.9	0.96

 **delivery** from stock
time

 **prices** price list online
www.igus.eu/eu/gbm