

# Technical Data Sheet TI-A11

## Safety Catchers KR series (with DGUV certification)

Compressive load direction (to mounting surface)

For general information, particularly regarding purpose, function, choosing the right type, attachment, and control, see "Technical Information TI-A10".

Also observe the "Operating Manual BA-A11.1".

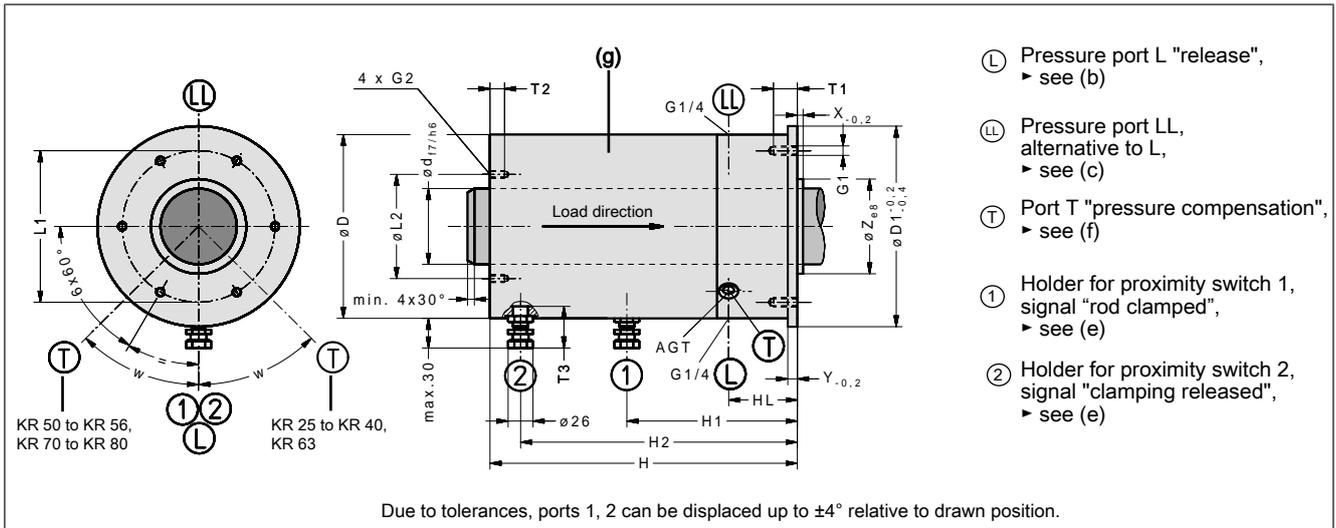


Fig. 1: Dimensions of the KR series Safety Catcher. Download of CAD data from [www.sitema.com](http://www.sitema.com).

Type	ID no. (order no.)	(a)														(e) (d)				V	AGT	HL	H1	H2	w	Wt.
		d	M	D	D1	H	Y	Z	X	L1	G1	T1	L2	G2	T2	T3	mm	mm	mm							
<b>KR 25</b>	<b>KR 025 30</b>	25	10	71	81	152	5	40	3	56	M6	15	64	M5	12	32	3	G1/8	48	84	130	45°	4			
KR 28	KR 028 30	28	15	82	92	169	5	45	3	65	M8	15	73	M5	12	32	4	G1/8	50	88	145	45°	6			
<b>KR 40</b>	<b>KR 040 30</b>	40	33	106	123	211	8	52	3	80	M8	20	56	M6	12	34	5	G1/4	62	167	125	45°	13			
KR 50	KR 050 30	50	52	125	142	264	8	65	3	110	M10	25	66	M6	12	45	10	G1/4	64	119	160	30°	20			
<b>KR 56</b>	<b>KR 056 30</b>	56	67	140	156	262	8	70	3	115	M10	25	75	M6	12	45	11	G1/4	72	122	166	30°	24			
KR 63	KR 063 30	63	100	160	177	285	10	80	5	140	M10	25	85	M6	13	45	12	G1/4	66	125	164	30°	35			
KR 70	KR 070 30	70	107	172	188	302	10	90	3	140	M10	25	100	M8	16	45	15	G1/4	73	129.5	166	30°	43			
<b>KR 80</b>	<b>KR 080 30</b>	80	133	194	212	322	10	100	3	160	M10	25	110	M8	16	45	16	G1/4	72	128	176	30°	57			

**bold types = standard sizes, available from stock**

Subject to modification without prior notice

- (a) M is the admissible load the mass to be secured exerts on the Safety Catcher. The holding (braking) force with a dry or hydraulic-oil wetted rod is at least  $2 \times M$  but will not exceed  $3.5 \times M$ .
- (b) The necessary pressure to keep the clamping released is 40 bar (if a spring base is installed, the required pressure for releasing without lifting is 60 bar). The permissible operating pressure is 250 bar.
- (c) On delivery, pressure port LL is plugged by a plug screw. It may be used as an alternative to pressure port L and is useful for filling or airbleeding the pressure chamber. We recommend to install an auto-bleeder at the free pressure port (see *Technical Information TI-Z10*).
- (d) Hydraulic operating volume
- (e) Proximity switch holders are provided for standard inductive proximity switches: M12 x 1, nominal switching distance 2 mm, flush mountable, NO (normally open); except KR 25 and KR 28: M8 x 1 with a nominal switching distance of 1.5 mm). T3 indicates how deep the proximity switch immerses into the unit measured from the holder's top. For easier mounting, the proximity switch holders have a depth stop and are preset to the

correct depth at delivery. The proximity switches only need to be inserted to the stop and then clamped. The proximity switches are not included in the standard scope of delivery but are available as accessories.

KR 40: The proximity switch holders are positioned in reverse order (H1 > H2).

- (f) Port T compensates internal volume changes during switching. At delivery, the port is plugged with an air filter which, in a dry and clean factory environment, offers sufficient protection against dust etc. If moisture or aggressive media can be sucked up, replace the filter by an unpressurized line which leads to a clean atmosphere (e.g. a clean, dry, and unpressurized vessel).
- (g) The surface of the housing parts is primed black, the mounting side is treated with corrosion protection wax.

## Technical Data Sheet TI-A11

### Safety Catchers K series (with DGUV certification)

Compressive load direction (to mounting surface)

For general information, particularly regarding purpose, function, choosing the right type, attachment, and control, see "Technical Information TI-A10".

Also observe the "Operating Manual BA-A11.2".

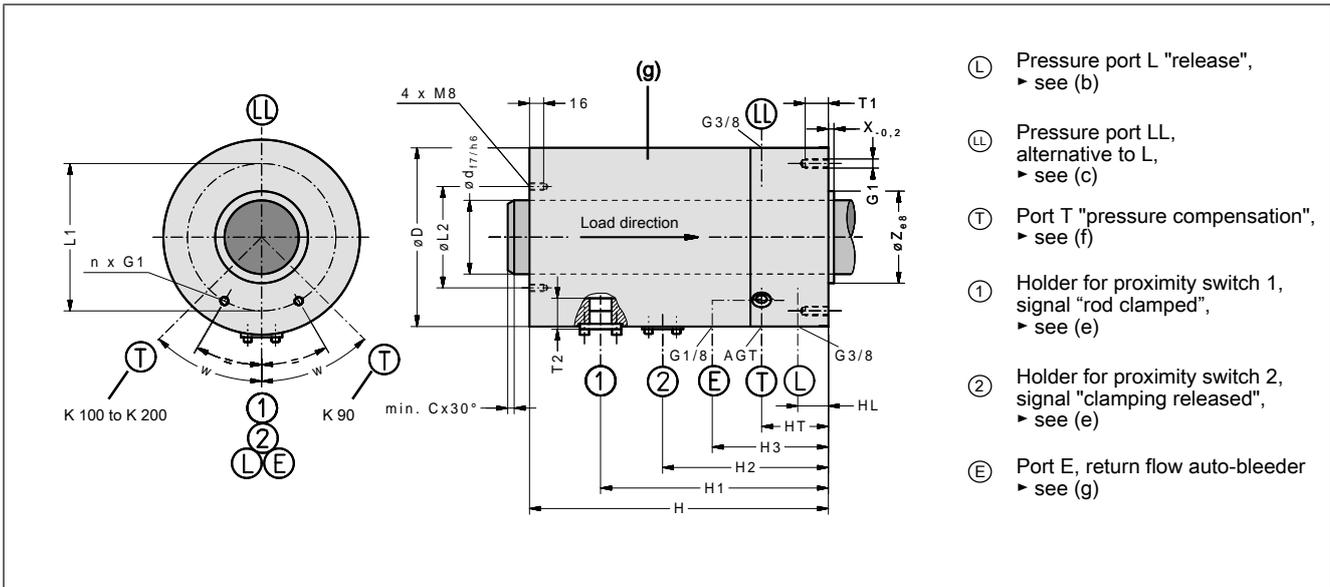


Fig. 2: Dimensions of the K series Safety Catcher. Download CAD files from [www.sitema.com](http://www.sitema.com).

Type	ID no. (order no.)	(a)										(e) (d)										Wt. kg	
		d mm	C mm	M kN	D mm	H mm	Z mm	X mm	L1 mm	n	G1	T1 mm	L2 mm	T2 mm	V cm <sup>3</sup>	AGT	HL mm	HT mm	H1 mm	H2 mm	H3 mm		w
K 90	K 090 30	90	5	160	218	284	110	3	170	6	M12	25	125	35	18	G1/8	20	47	188	138	105	30°	63
<b>K 100</b>	<b>K 100 30</b>	100	5	220	240	310	120	3	160	6	M12	25	135	34	24	G1/4	22	28	230	180	105	40°	83
K 110	K 110 30	110	5	270	240	335	130	4	200	4	M16	30	148	34	24	G1/4	24	38	192	142	105	57.5°	90
<b>K 125</b>	<b>K 125 30</b>	125	5	330	270	356	150	4	220	4	M16	30	160	37	24	G1/4	22	33	208	158	100	55°	118
<b>K 140</b>	<b>K 140 30</b>	140	5	450	320	390	170	5	250	4	M16	30	180	35	24	G1/4	22	35	233	183	102	30°	184
K 160	K 160 30	160	5	700	360	505	190	5	300	4	M16	30	210	52	24	G1/4	25	37	138	88	102	60°	302
K 180	K 180 30	180	5	750	410	460	220	6	330	4	M20	40	226	65	36	G1/4	19	52	335	285	111	19°	360
K 200	K 200 30	200	7	850	448	533	240	6	340	8	M20	40	252	67	36	G1/4	19	40	334	279	111	33°	500

**bold types = standard sizes, available from stock**

Subject to modification without prior notice

(a) M is the admissible load the mass to be secured exerts on the Safety Catcher. The holding (braking) force with a dry or hydraulic-oil wetted rod is at least 2 x M but will not exceed 3.5 x M.

(b) The necessary pressure to keep the clamping released is 40 bar (if a spring base is installed, the required pressure for releasing without lifting is 60 bar). The permissible operating pressure is 250 bar.

(c) On delivery, pressure port LL is plugged by a plug screw. It may be used as an alternative to pressure port L and is useful for filling or airbleeding the pressure chamber.

(d) Hydraulic operating volume

(e) Proximity switch holders are provided for standard inductive proximity switches: M12 x 1, nominal switching distance 2 mm, flush mountable, NO (normally open). The dimension T2 indicates how deep the proximity switch immerses into the unit measured from the holder's top. The proximity switches are not

included in the standard scope of delivery but are available as accessories.

(f) Port T compensates internal volume changes during switching. At delivery, the port is plugged with an air filter which, in a dry and clean factory environment, offers sufficient protection against dust etc. If moisture or aggressive media can be sucked up, replace the filter by an unpressurized line which leads to a clean atmosphere (e.g. a clean, dry, and unpressurized vessel).

(g) For air-bleeding, an auto-bleeder is integrated. Due to the permanent bleeding, a small quantity of oil-air mix will escape from port E. Therefore, an unpressurized hose to the tank is required (for further information, see *Technical Information TI-Z10*).

(h) The surface of the housing parts is primed black, the mounting side is treated with corrosion protection wax.