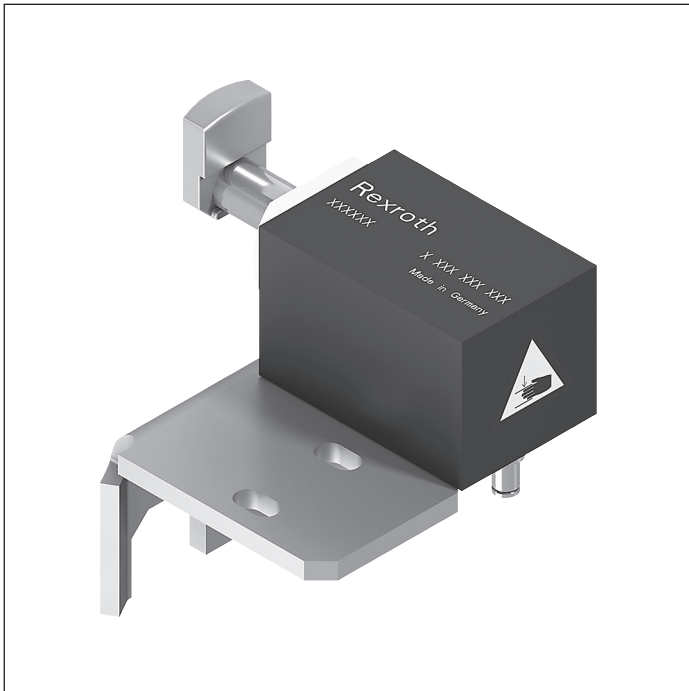
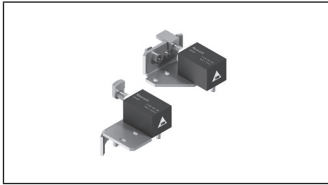


Damper



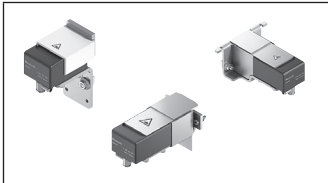
DA 2 dampers are used to cushion the impact of workpiece pallets when they are moved from a transverse conveyor section into a longitudinal conveyor section or vice versa.



DA 2/60 damper



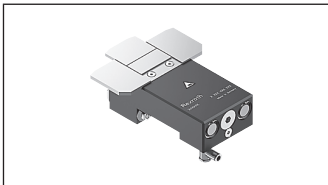
8-62



**DA 2/100, DA 2/100-C,
DA 2/100-E damper**



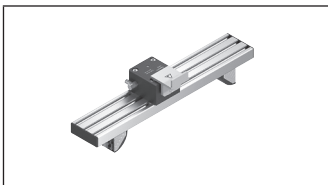
8-67



DA 2/150-E damper



8-79

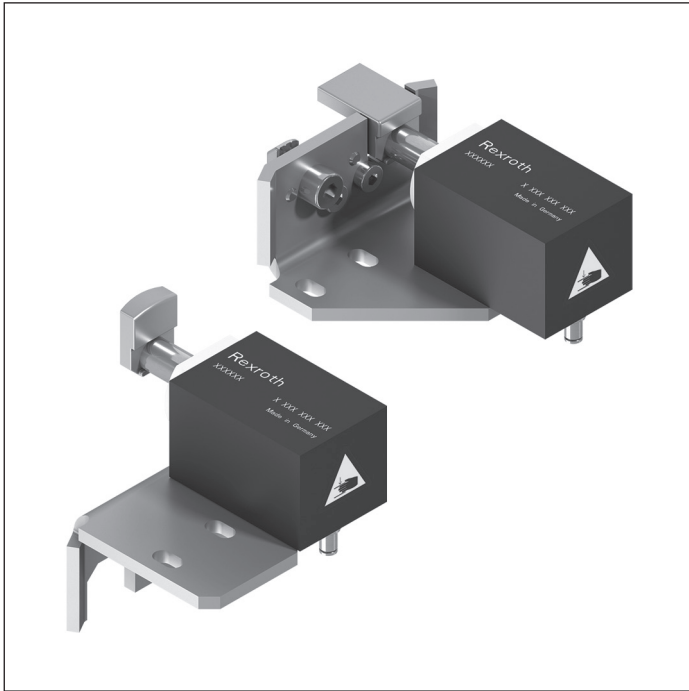


DA 2/100-H, DA 2/250-H damper



8-82

DA 2/60 damper



- ▶ For permitted total weight of workpiece pallets up to 60 kg
- ▶ Pneumatic damper
- ▶ Continuously adjustable
- ▶ Optimal damping at a ratio of 2:1 between heavy and light workpiece pallets
- ▶ Can be combined with WT 2/E, WT 2, WT 2/F, WT 2/H and WT 2/F-H
- ▶ Installation location: ST 2 section, BS 2 belt section and HQ 2 lift transverse unit
- ▶ Not suitable for HQ 2/U2 and HQ 2/...-H

The damper cushions the impact of workpiece pallets when they are moved from a transverse conveyor section into a longitudinal section and vice versa. The pneumatic return

occurs as the stop gate opens, which permits the workpiece pallet to move toward the damper.

Delivery notes

Scope of delivery

- ▶ Includes fastening material for mounting on an ST 2 or a BS 2, and EQ 2 or HQ 2/U, HQ 2/T, HQ 2/S or HQ 2/O
- ▶ DA 2/60 damper with two different stops for optional use infeeding or outfeeding use

Condition on delivery

- ▶ Not assembled

Ordering information

Product designation	Material number
DA 2/60 damper	3842557983

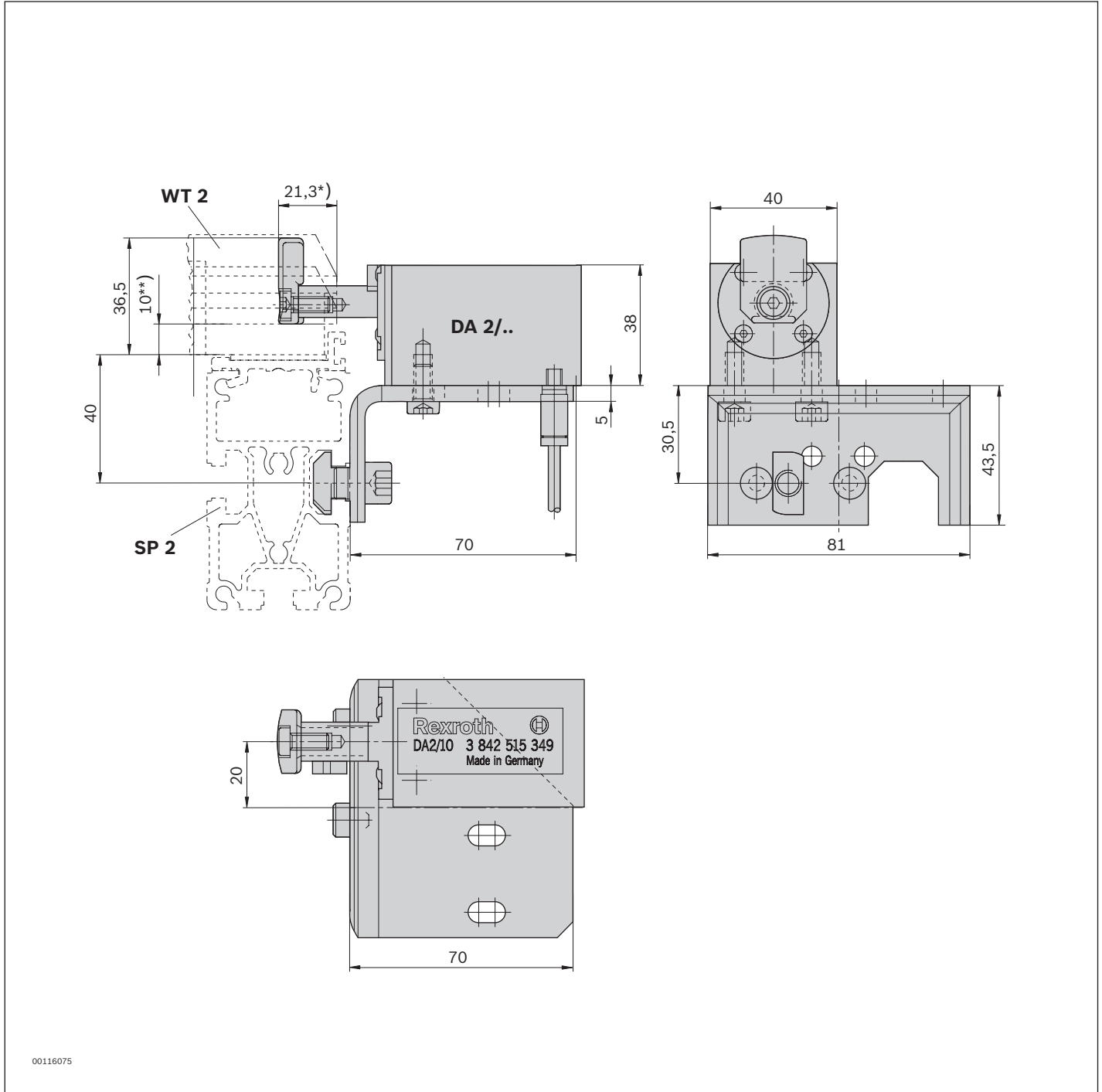
Technical data

Material number		3842557983	
Load			
Max. total workpiece pallet weight	m _G	kg	60
Min. workpiece pallet weight	m	kg	1
Features			
Material		Housing: Aluminum, hard anodized Stop: Steel, hardened	
Operating temperature ¹		°C	0 ... +60
Additional information			
Pneumatic connector	d	mm	4

¹ High-temperature damper on request

Permitted total weight of workpiece pallet	Nominal speed
m_G (kg)	v_N (m/min)
60	6
40	9
35	12
30	18
24	24
18	30
10	36

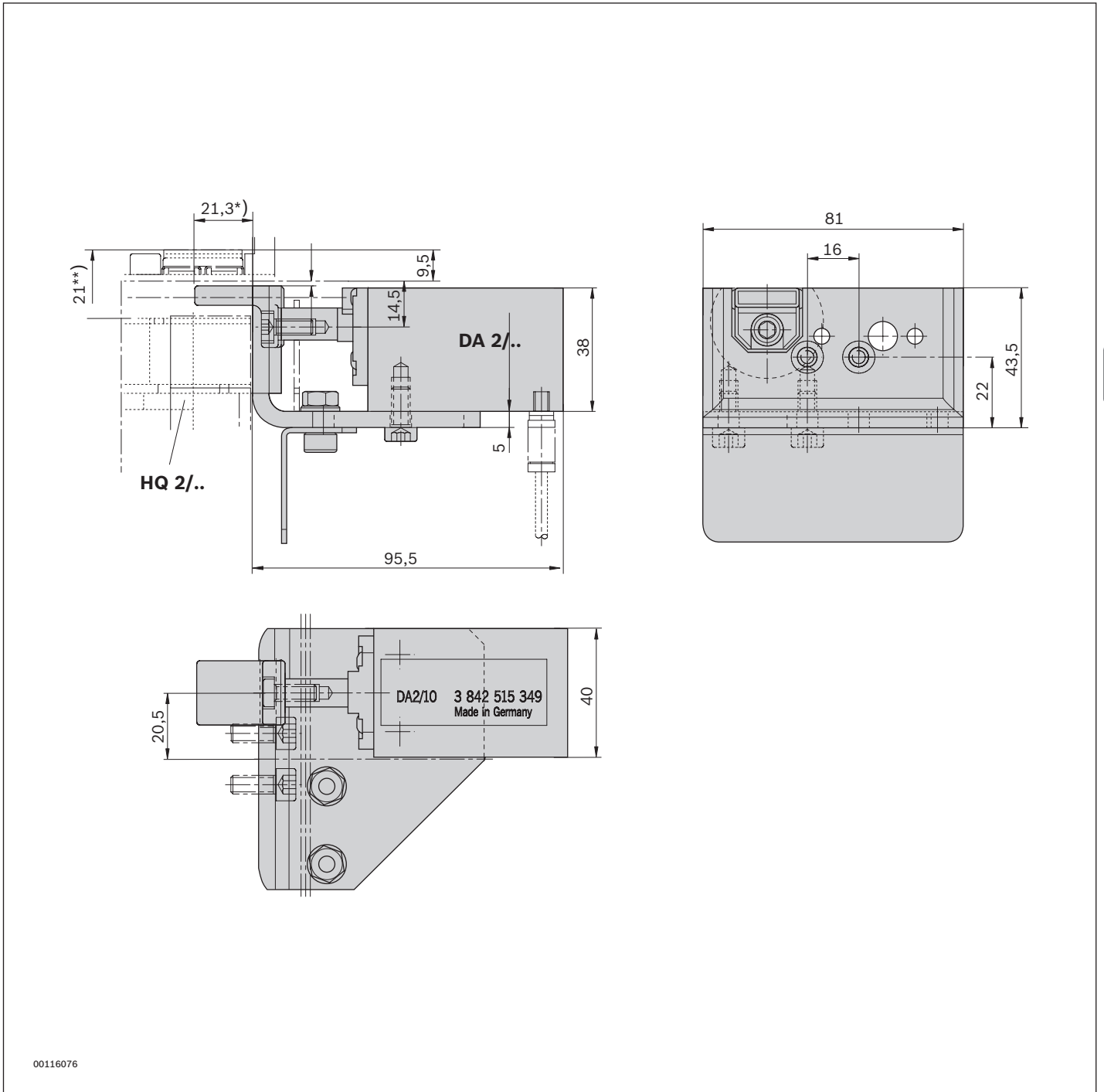
Dimensions
DA 2 – SP 2



* = Stroke of damper

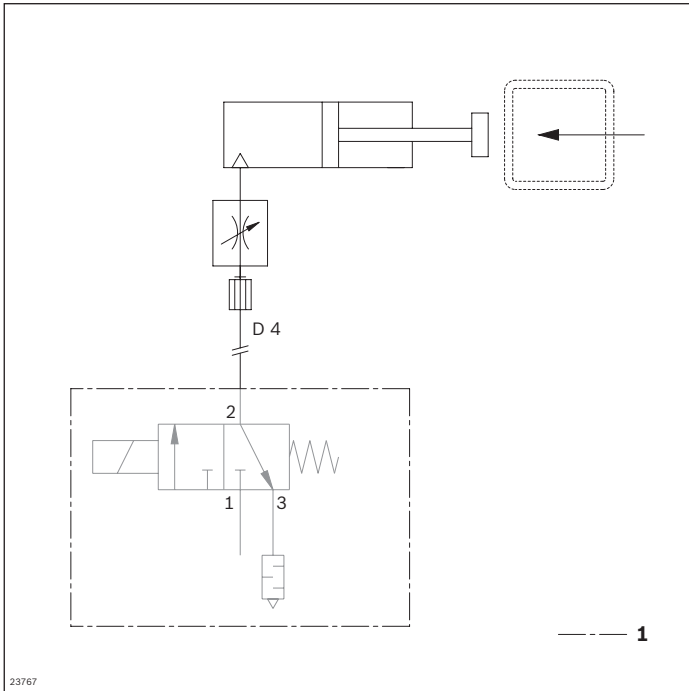
** = Stroke of WT 2

DA 2 - HQ 2



* = Stroke of damper
** = Stroke of HQ 2
*** = Center HQ 2

Circuit diagrams



1 Not included in delivery

DA 2/100-B damper



- ▶ For permitted total weight of workpiece pallets up to 100 kg
- ▶ Pneumatic damper
- ▶ Continuously adjustable
- ▶ Before outfeeding via an HQ 2/U2 lift transverse unit
- ▶ Optimal damping at a ratio of 2:1 between heavy and light workpiece pallets
- ▶ Can be combined with WT 2, WT 2/F, WT 2/H and WT 2/F-H
- ▶ Installation location: HQ 2/U2 lift transverse unit

8

The damper cushions the impact of the arriving workpiece pallet. The DA 2/100 is suitable for outfeeding via an HQ 2/U2 lift transverse unit.

The pneumatic return occurs as the stop gate opens, which

permits the workpiece pallet to move toward the damper. Mounted at the end or in the transverse conveyor directly on the conveyor section, since the damper is not traversable.

Delivery notes

Scope of delivery

- ▶ Incl. fastening material
- ▶ DA 2/100-B damper for outfeeding the WT 2, WT 2/F, WT 2/H or WT 2/F-H workpiece pallets, via an HQ 2/U2, required at $v_N > 12$ m/min or total weight of the workpiece pallet > 1 kg/cm

Condition on delivery

- ▶ Not assembled

Ordering information

Product designation	Material number
DA 2/100-B damper	3842525733

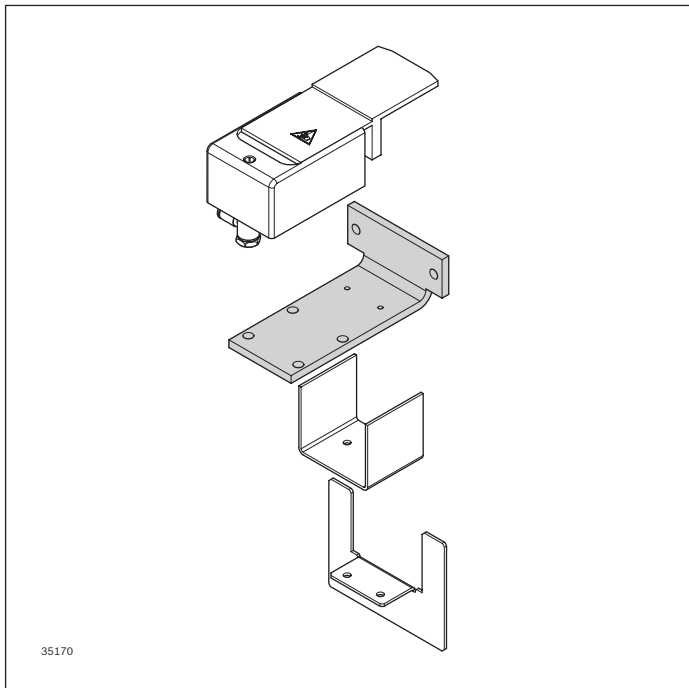
Technical data

Material number			3842525733
Load			
Max. total workpiece pallet weight	m_G	kg	100
Min. workpiece pallet weight	m	kg	5
Features			
Material specification			Housing: Aluminum, hard anodized Stop: Steel, hardened
Operating temperature ¹		°C	0 ... +60
Additional information			
Pneumatic connector	d	mm	6

¹ High-temperature damper on request

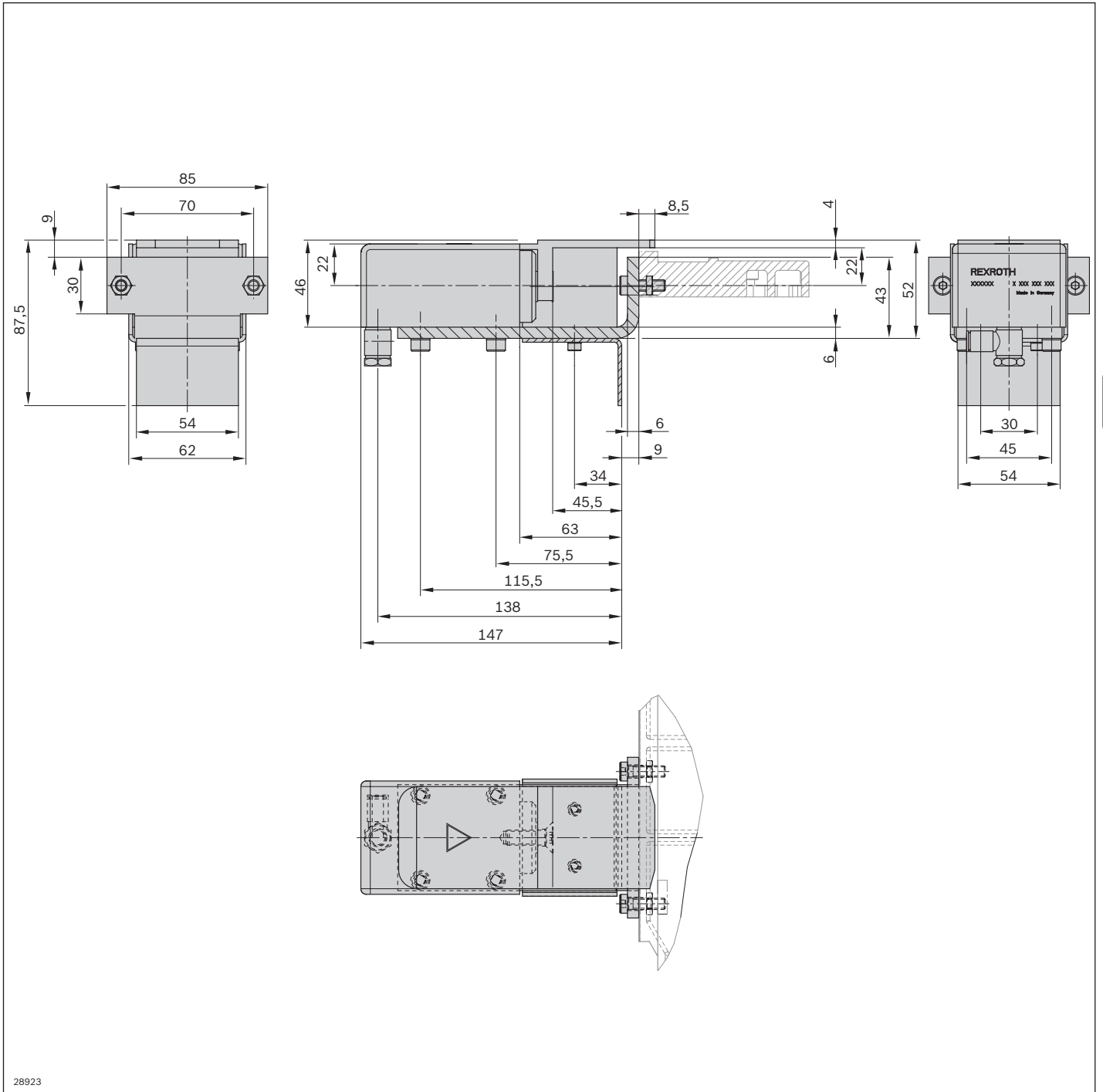
	Permitted total weight of workpiece pallet	Nominal speed
	m_G (kg)	v_N (m/min)
	100	6
	100	9
	100	12
	95	15
	55	18

Attachment plate

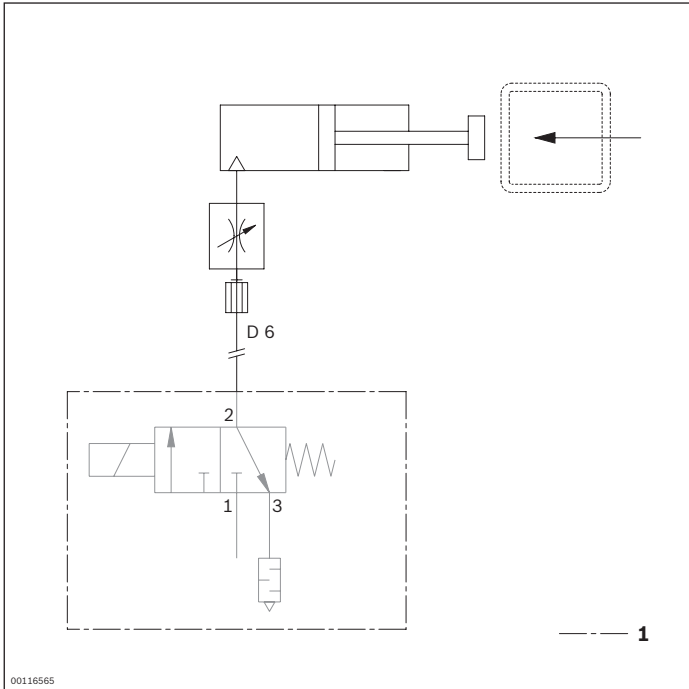


35170

Dimensions



Circuit diagrams



DA 2/100-C damper



- ▶ For permitted total weight of workpiece pallets up to 100 kg
- ▶ Pneumatic damper
- ▶ Continuously adjustable
- ▶ During infeeding in a longitudinal section
- ▶ Optimal damping at a ratio of 2:1 between heavy and light workpiece pallets
- ▶ Can be combined with WT 2, WT 2/F, WT 2/H and WT 2/F-H
- ▶ Installation location: ST 2 section or BS 2 belt section

8

The damper cushions the impact of the arriving workpiece pallet. The DA 2/100-C is suitable for infeeding from a transverse section into a longitudinal section. It is mounted directly on the section profile of the longitudinal section.

The pneumatic return occurs as the stop gate opens, which permits the workpiece pallet to move toward the damper. The damper is not traversable.

Delivery notes

Scope of delivery

- ▶ Incl. fastening material
- ▶ DA2/100-C damper for infeeding the WT 2 and WT 2/F workpiece pallets

Condition on delivery

- ▶ Not assembled

Ordering information

Product designation	Material number
DA 2/100-C damper	3842525734

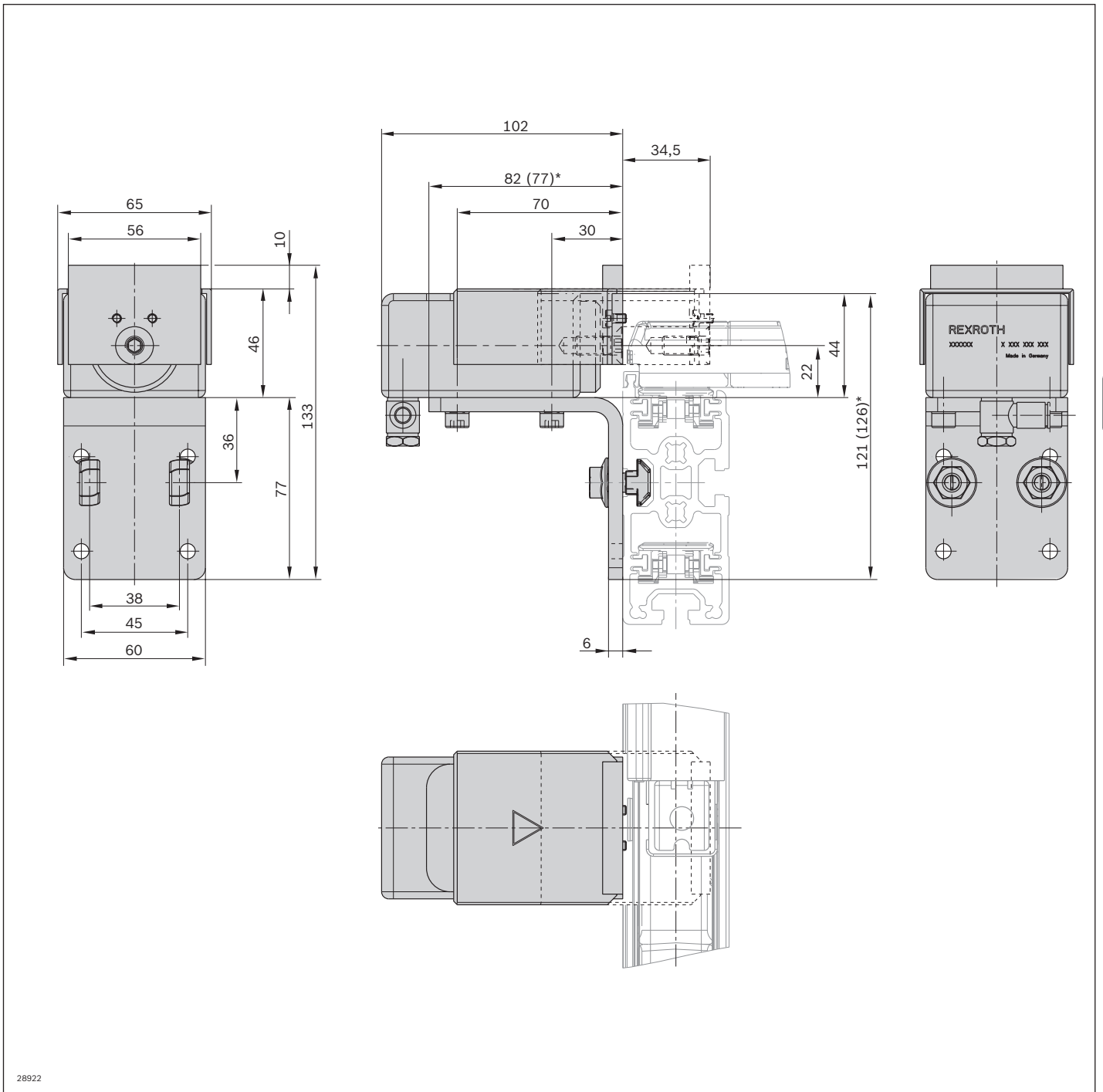
Technical data

Material number		3842525734	
Load			
Max. total workpiece pallet weight	m_G	kg	100
Min. workpiece pallet weight	m	kg	5
Features			
Material specification		Housing: Aluminum, hard anodized Stop: Steel, hardened	
Operating temperature ¹		°C	0 ... +60
Additional information			
Pneumatic connector	d	mm	6

¹ High-temperature damper on request

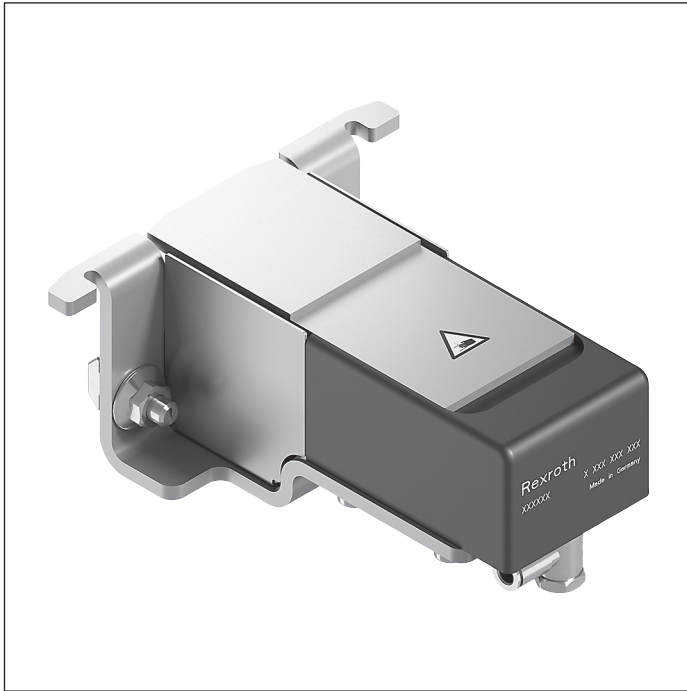
	Permitted total weight of workpiece pallet	Nominal speed
	m_G (kg)	v_N (m/min)
	100	6
	100	9
	100	12
	95	15
	55	18

Dimensions



* Dimension in brackets apply to mounting on ST 2/...-H section profile

DA 2/100-E damper



- ▶ For permitted total weight of workpiece pallets up to 100 kg
- ▶ Pneumatic damper
- ▶ Continuously adjustable
- ▶ Optimal damping at a ratio of 2:1 between heavy and light workpiece pallets
- ▶ Can be combined with WT 2, WT 2/F, WT 2/H and WT 2/F-H
- ▶ Installation location: HQ 2/C-H or HQ 2 lift transverse unit

8

The damper cushions the impact of the arriving workpiece pallet. The DA 2/100-E is suitable for outfeeding via an HQ 2/U-H. The pneumatic return is parallel to opening of the

stop gate, which permits the workpiece pallet to move towards the damper. The damper is traversable.

Delivery notes

Scope of delivery

- ▶ Incl. fastening material
- ▶ DA 2/100-E damper for outfeeding the WT 2, WT 2/F, WT 2/H or WT 2/F-H workpiece pallets via an HQ 2/U-H

Condition on delivery

- ▶ Not assembled

Ordering information

Product designation	Material number
DA 2/100-E damper	3842548585

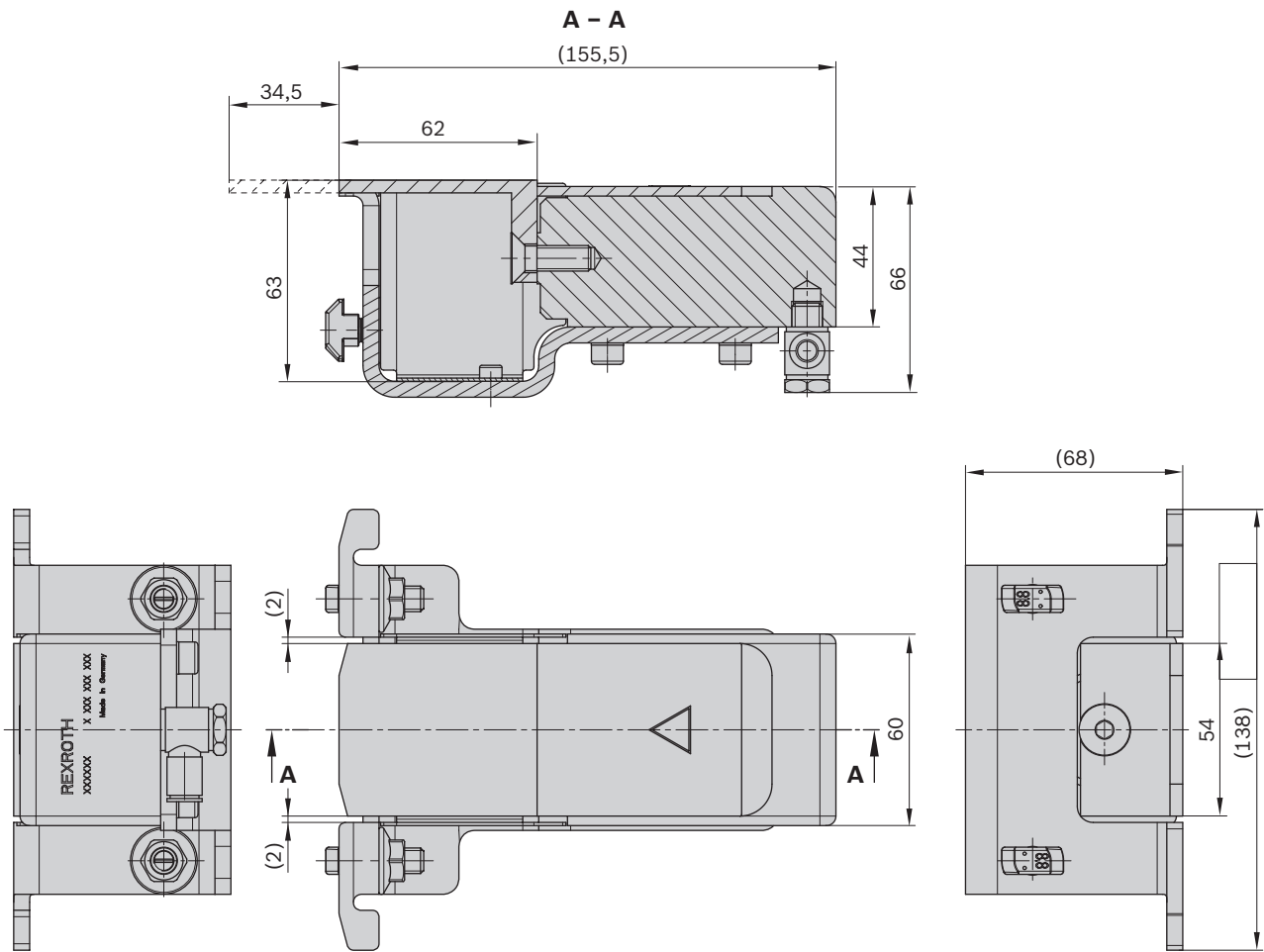
Technical data

Material number		3842548585	
Load			
Max. total workpiece pallet weight	m _G	kg	100
Min. workpiece pallet weight	m	kg	5
Features			
Material specification		Housing: Aluminum, hard anodized Stop: Steel, hardened	
Operating temperature ¹		°C	0 ... +60
Additional information			
Pneumatic connector	d	mm	6

¹ High-temperature damper on request

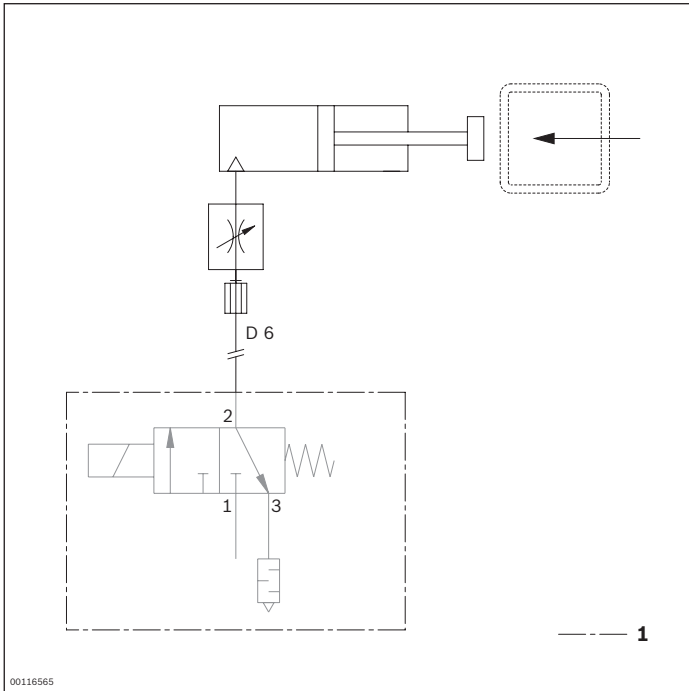
	Permitted total weight of workpiece pallet	Nominal speed
	m_G	v_N
	(kg)	(m/min)
	100	6
	100	9
	100	12
	95	15
	55	18

Dimensions



28925

Circuit diagrams



1 Not included in delivery

DA 2/150-E damper



- ▶ Hydraulic damper with closed damping system
- ▶ Before outfeeding via an HQ 2/U-H lift transverse unit
- ▶ For permitted total weight of workpiece pallets up to 130 kg with belts, toothed belts or flat top chains
- ▶ For permitted total weight of workpiece pallets up to 150 kg with accumulation roller chains
- ▶ Can be combined with WT 2, WT 2/F, WT 2/H and WT 2/F-H
- ▶ Installation location: HQ 2/C-H or HQ 2 lift transverse unit

8

The damper cushions the impact of the arriving workpiece pallet. The DA 2/150-E damper is suitable for outfeeding a workpiece pallet via an HQ 2/U-H. The pneumatic return is parallel to opening of the stop gate, which permits the

workpiece pallet to move towards the damper. The damper is traversable.

Delivery notes

Scope of delivery

- ▶ Incl. fastening material
- ▶ DA 2/150-E damper for outfeeding the WT 2, WT 2/F, WT 2/H or WT 2/F-H workpiece pallets via an HQ 2/U-H

Condition on delivery

- ▶ Not assembled

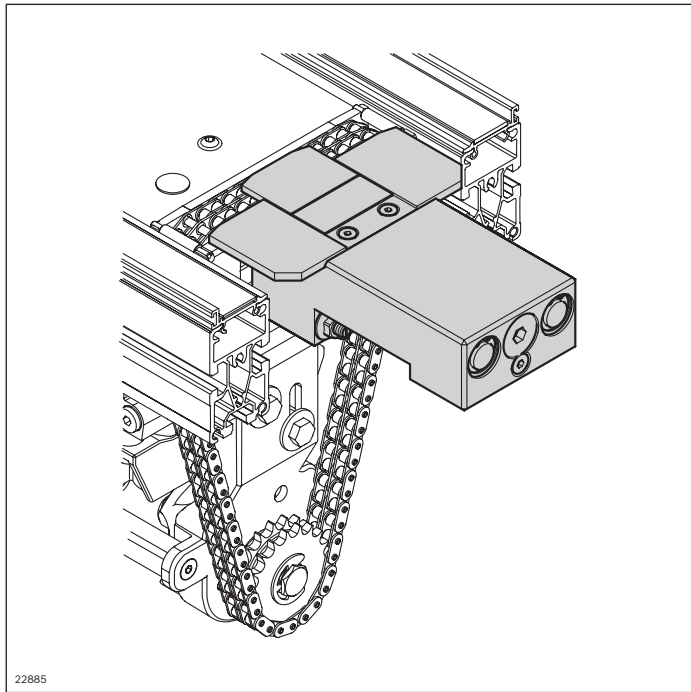
Ordering information

Product designation	Material number
DA 2/150-E damper	3842548644

Technical data

Material number		3842548644	
Load			
Max. total workpiece pallet weight	m_G	kg	Belt, toothed belt, flat top chain 130 Accumulation roller chain 150
Min. workpiece pallet weight	m	kg	Belt, toothed belt, flat top chain 15 Accumulation roller chain 40
Features			
Material specification		Housing: Aluminum, hard anodized Stop: Steel, hardened	
Operating temperature ¹		°C	0 ... +60
Additional information			
Pneumatic connector	d	mm	6

¹ High-temperature damper on request



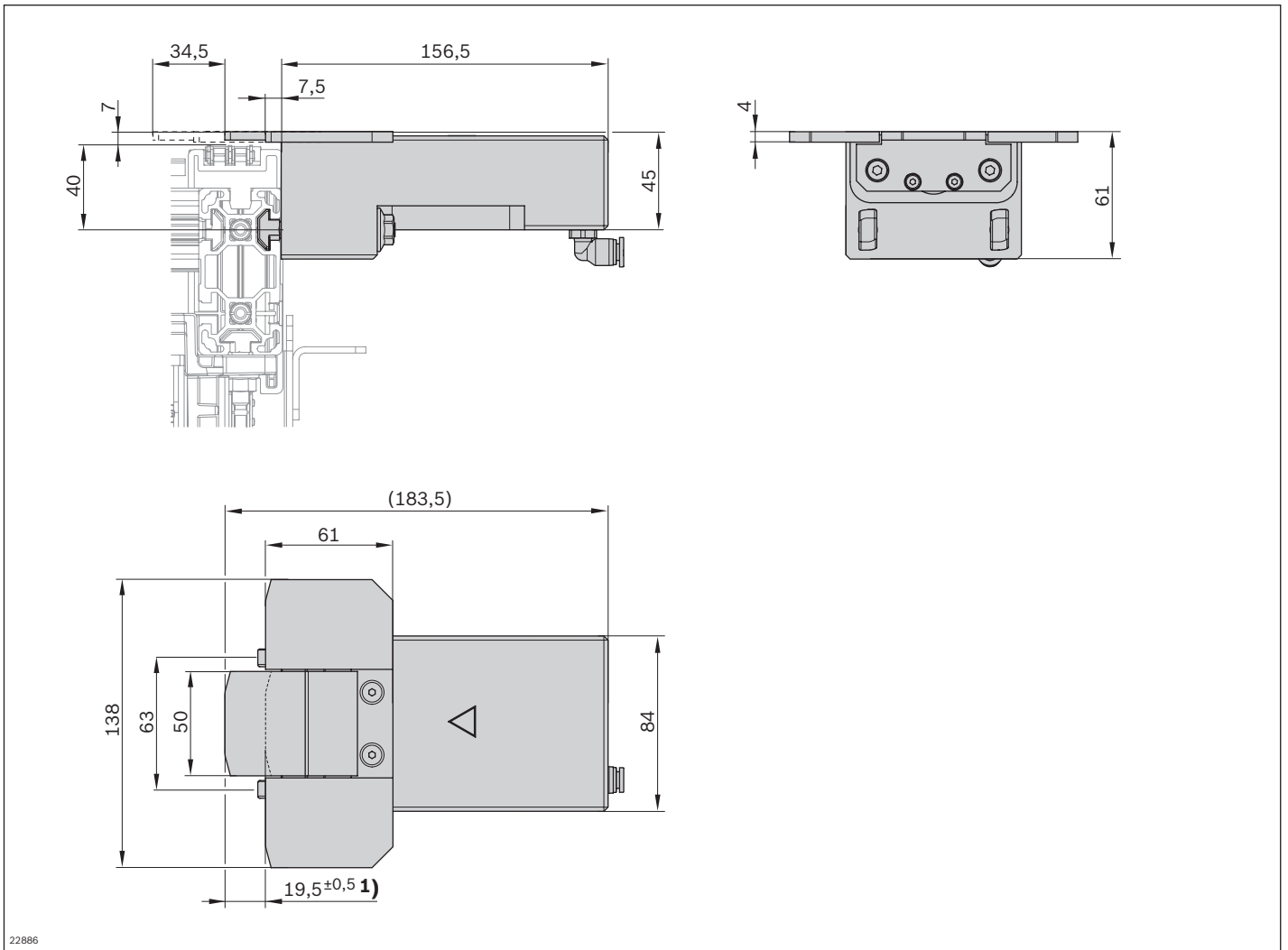
Belt, toothed belt, or flat top chain

Permitted total weight of workpiece pallet	m_G (kg)	Nominal speed
		v_N (m/min)
130	130	6
130	130	9
130	130	12
130	130	15
130	130	18

Accumulation roller chain

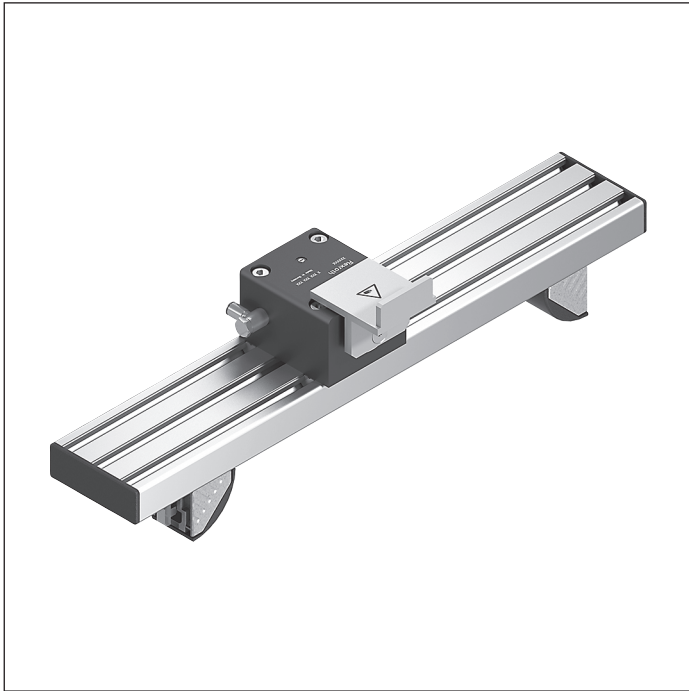
Permitted total weight of workpiece pallet	m_G (kg)	Nominal speed
		v_N (m/min)
150	150	6
150	150	9
150	150	12
150	150	15
150	150	18

Dimensions



1 Stroke

DA 2/100-H damper



- ▶ For permitted total weight of workpiece pallets up to 100 kg
- ▶ Pneumatic damper
- ▶ Continuously adjustable
- ▶ Installation location: HQ 2/C-H lift transverse unit
- ▶ Can be combined with WT 2/H and WT 2/F-H

The damper cushions the impact of workpiece pallets when they are moved from a transverse conveyor section into a longitudinal section and vice versa. The pneumatic return occurs as the stop gate opens, which permits the

workpiece pallet to move toward the damper. For installation in a HQ 2/C-H lift transverse unit. The damper is traversable.

Delivery notes

Scope of delivery

- ▶ Incl. fastening material
- ▶ DA 2/100-H damper for infeeding or outfeeding the WT 2/H or WT 2/F-H workpiece pallets via an HQ 2/C-H

Condition on delivery

- ▶ Not assembled

Ordering information

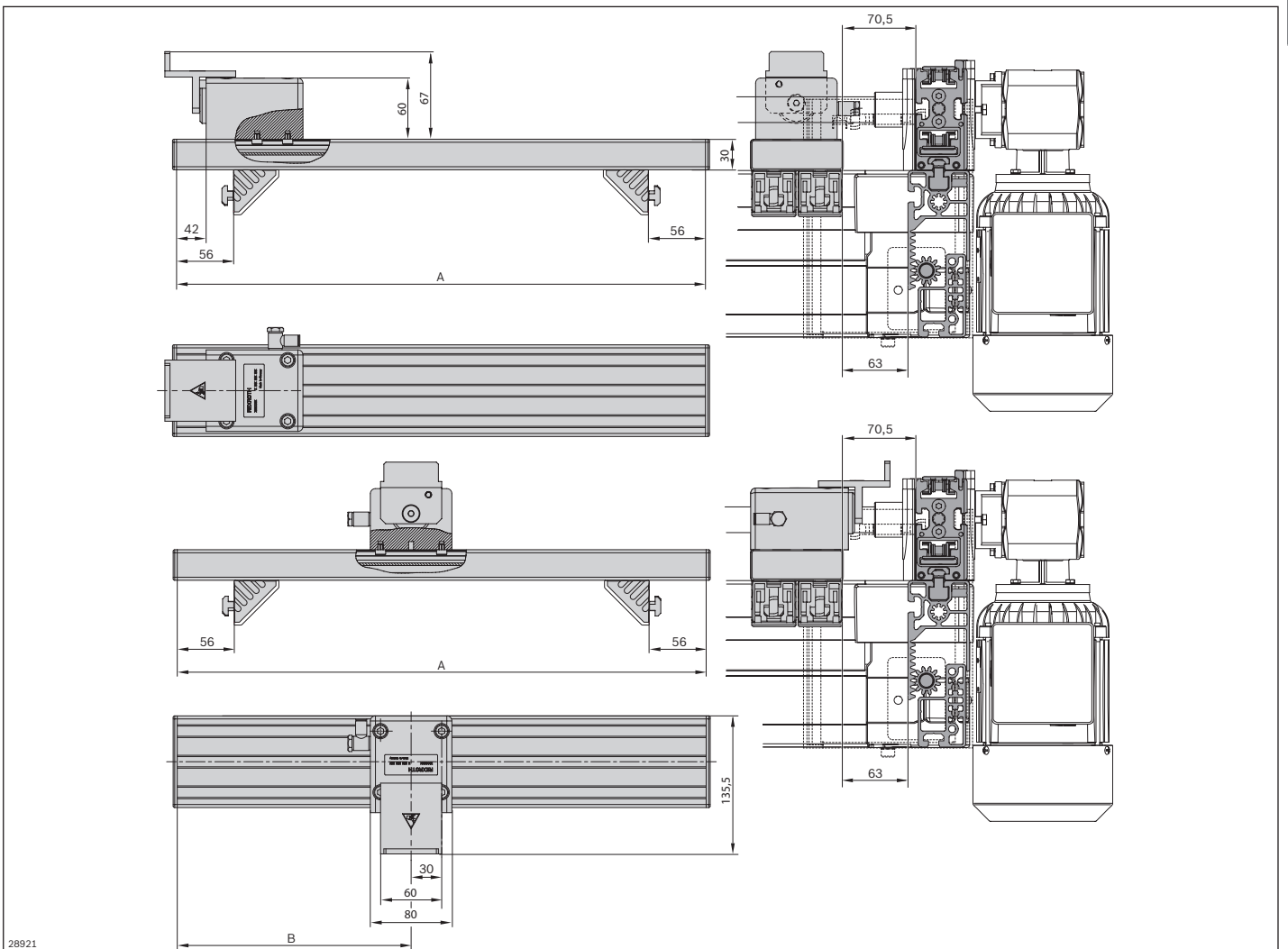
Material number		3842998745
b _L (mm)	Track width in the longitudinal conveyor	480, 640, 800, 1040, 1200
b _L (mm)	Track width in the longitudinal conveyor	480 ... 1200

Technical data

Material number		3842998745	
Load			
Max. total workpiece pallet weight	m_G	kg	100
Min. workpiece pallet weight	m	kg	5
Features		Housing: Aluminum; hard anodized Stop: Steel; hardened Section profile: Aluminum, natural; anodized	
Material specification			
Operating temperature ¹		°C	0 ... +60
Pneumatic connector	d	mm	6

¹ High-temperature damper on request

Dimensions



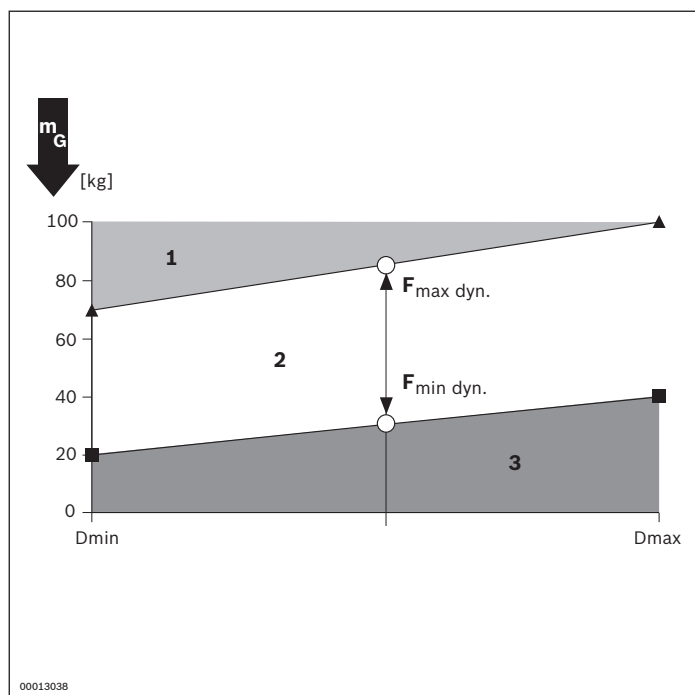
28921

Track width in the longitudinal conveyor b_L (mm)	Dimension A (mm)
480	359
640	519
800	679
1040	919
1200	1079

Track width in the longitudinal conveyor b_L (mm)	Dimension B (mm)
480	149.5
640	229.5
800	309.5
1040	429.5
1200	509.5

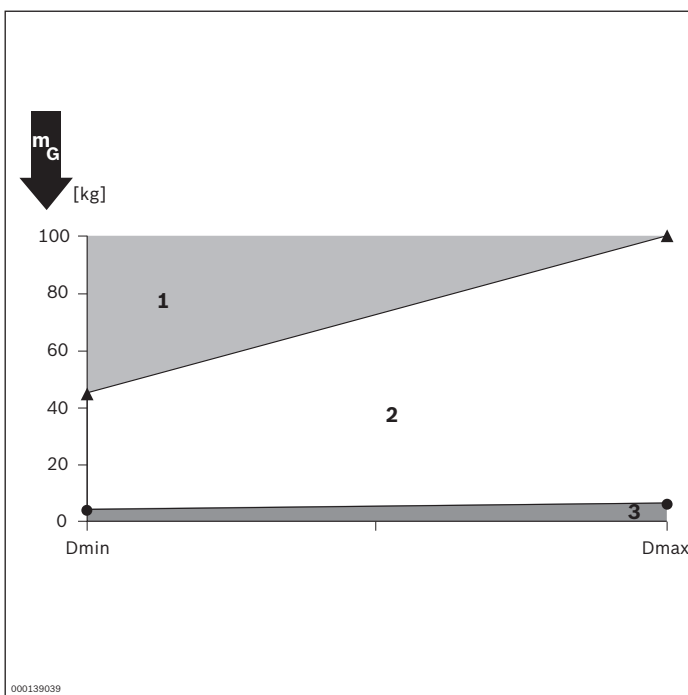
Characteristic curve diagram

Damping setting, accumulation roller chain $\mu = 0.02$



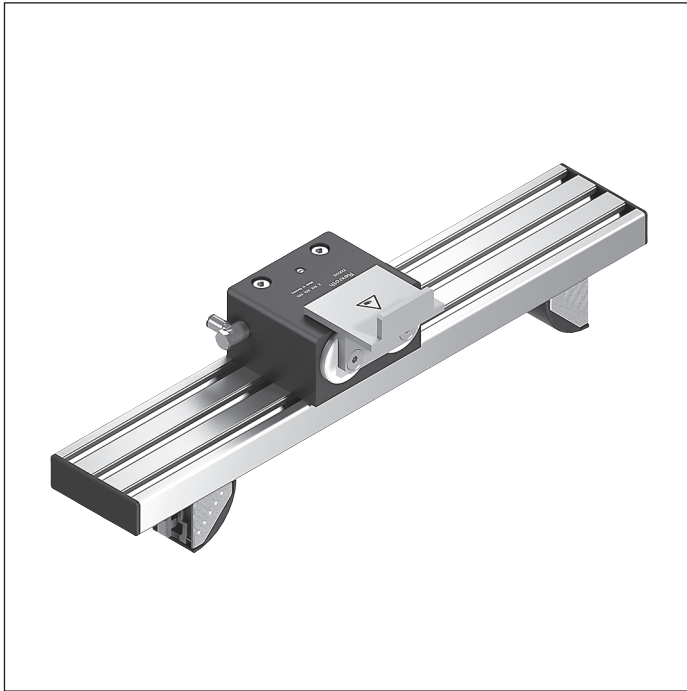
- 1 Damping effect limited, use of a VE 2/RS-H return stop recommended
 - 2 Recommended range
 - 3 Not possible
- Dmax/min damping setting

Damping setting, flat top chain $\mu = 0.2$



- 1 Damping effect limited, use of a VE 2/RS-H return stop recommended
 - 2 Recommended range
 - 3 Not possible
- Dmax/min damping setting

DA 2/250-H damper



- ▶ For permitted total weight of workpiece pallets up to 250 kg
- ▶ Pneumatic damper
- ▶ Continuously adjustable
- ▶ Installation location: HQ 2/C-H lift transverse unit
- ▶ Can be combined with WT 2/H and WT 2/F-H

8

The damper cushions the impact of workpiece pallets when they are moved from a transverse conveyor section into a longitudinal section and vice versa. The pneumatic return occurs as the stop gate opens, which permits the

workpiece pallet to move toward the damper. For installation in a HQ 2/C-H lift transverse unit. The damper is traversable.

Delivery notes

Scope of delivery

- ▶ Incl. fastening material
- ▶ DA 2/100-H damper for infeeding or outfeeding the WT 2/H or WT 2/F-H workpiece pallets via an HQ 2/C-H

Condition on delivery

- ▶ Not assembled

Ordering information

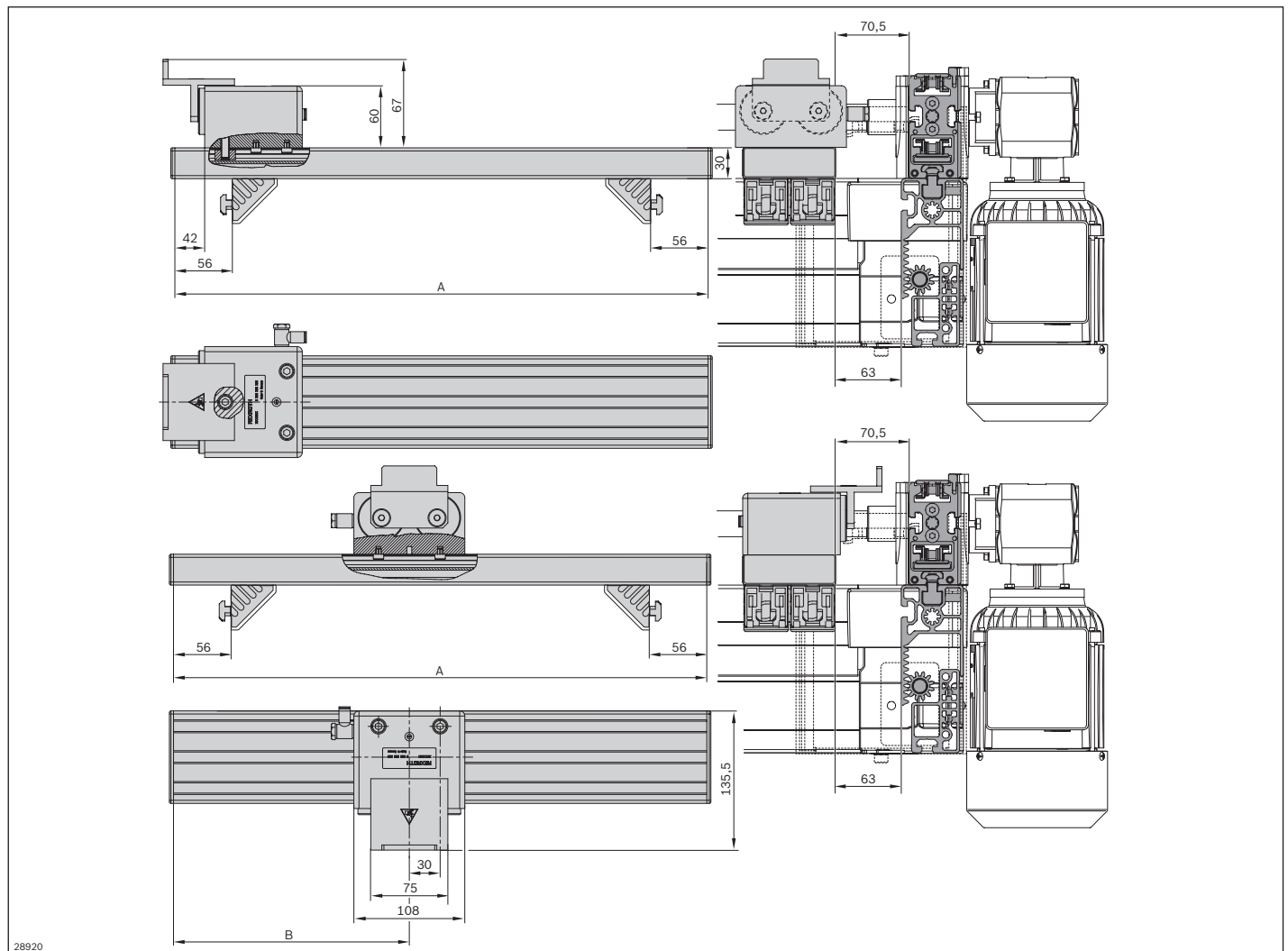
Material number		3842998746
b _L (mm)	Track width in the longitudinal conveyor	480, 640, 800, 1040, 1200
b _L (mm)	Track width in the longitudinal conveyor	480 ... 1200

Technical data

Material number		3842998746	
Load			
Max. total workpiece pallet weight	m_G	kg	250
Min. workpiece pallet weight	m	kg	5
Features			
Material specification		Housing: Aluminum, hard anodized Stop: Steel; hardened Section profile: Aluminum, natural; anodized	
Operating temperature ¹		°C	0 ... +60
Pneumatic connector	d	mm	6

¹ High-temperature damper on request

Dimensions



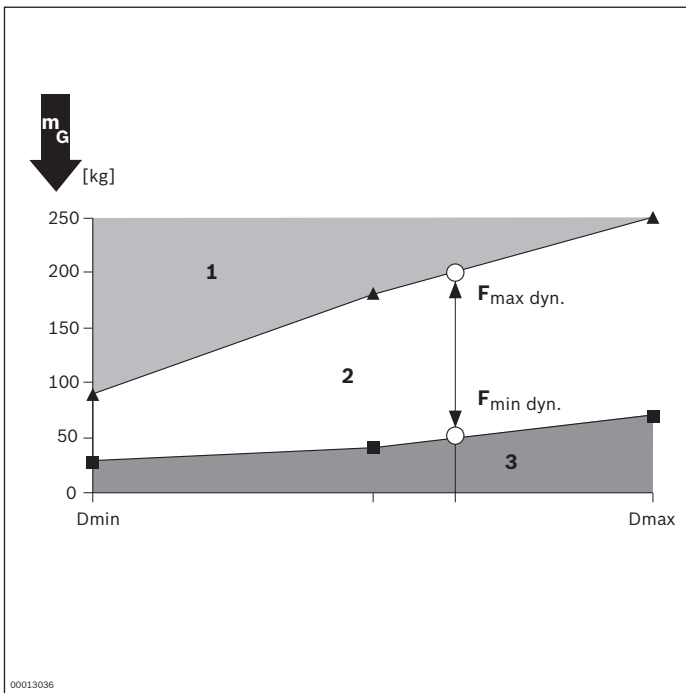
28920

Track width in the longitudinal conveyor b_L (mm)	Dimension A (mm)
480	359
640	519
800	679
1040	919
1200	1079

Track width in the longitudinal conveyor b_L (mm)	Dimension B (mm)
480	149.5
640	229.5
800	309.5
1040	429.5
1200	509.5

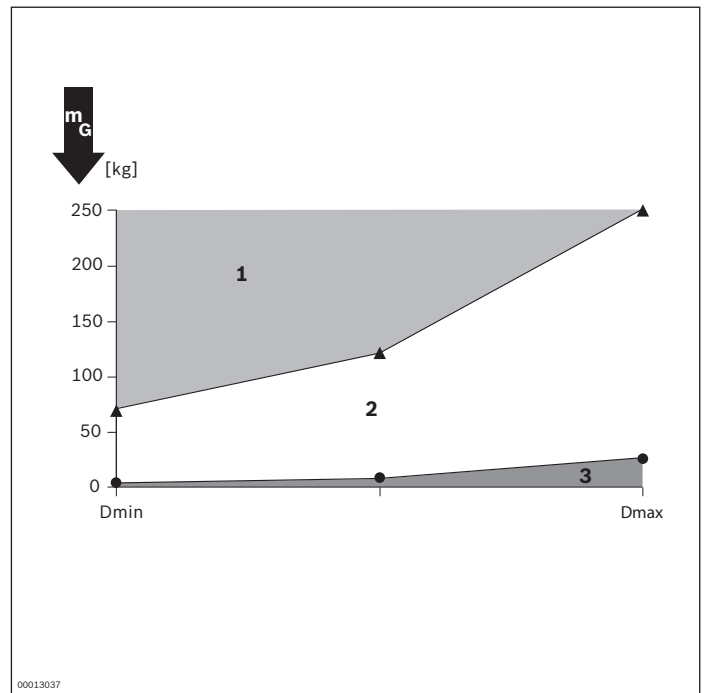
Characteristic curve diagram

Damping setting, accumulation roller chain $\mu = 0.02$



- 1 Damping effect limited, use of a VE 2/RS-H return stop recommended
 - 2 Recommended range
 - 3 Not possible
- Dmax/min damping setting

Damping setting, flat top chain $\mu = 0.2$



- 1 Damping effect limited, use of a VE 2/RS-H return stop recommended
 - 2 Recommended range
 - 3 Not possible
- Dmax/min damping setting