



▶ PNEUMATIC



Series SHX

718



Series LI

724

LINEAR CYLINDERS

SERIES SHX

▶ PRODUCT ADVANTAGES



▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

▶ Constant drive force

Equal force and travel time when retracting and extending increases your machine's process reliability

▶ Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

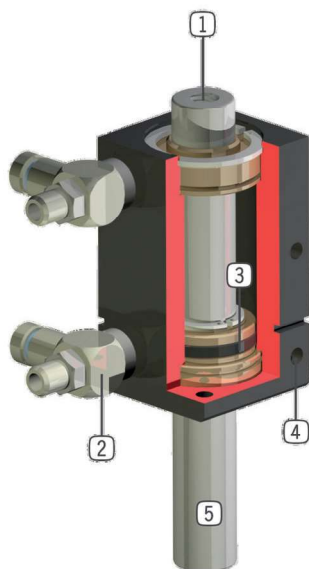
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	SHX-	<input type="checkbox"/>	25	
Continuous piston rod		D		



► BENEFITS IN DETAIL



- ① **Connection to customer specific application**
 - possible from several sides on XD series
- ② **Energy supply**
 - reducing exhaust air is recommended
- ③ **Drive**
 - double-acting pneumatic cylinder
- ④ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑤ **Piston rod**
 - polished, hard chrome plated steel
 - continuous in design XD

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



LINEAR CYLINDERS

INSTALLATION SIZE SH-X

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Mounting block

KB3M



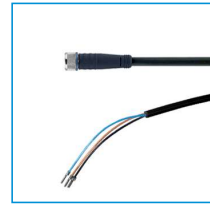
Inductive proximity switch
- Cable 5 m

NJ3-E2



Inductive Proximity Switch
Cable 0,3 m - Connector
M8

NJ3-E2SK



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector customiz-
able Straight - Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRVM5X4

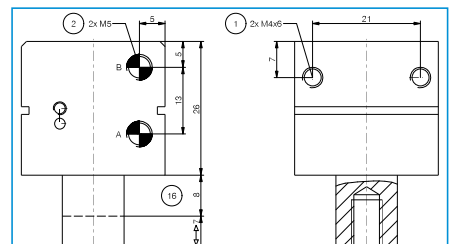
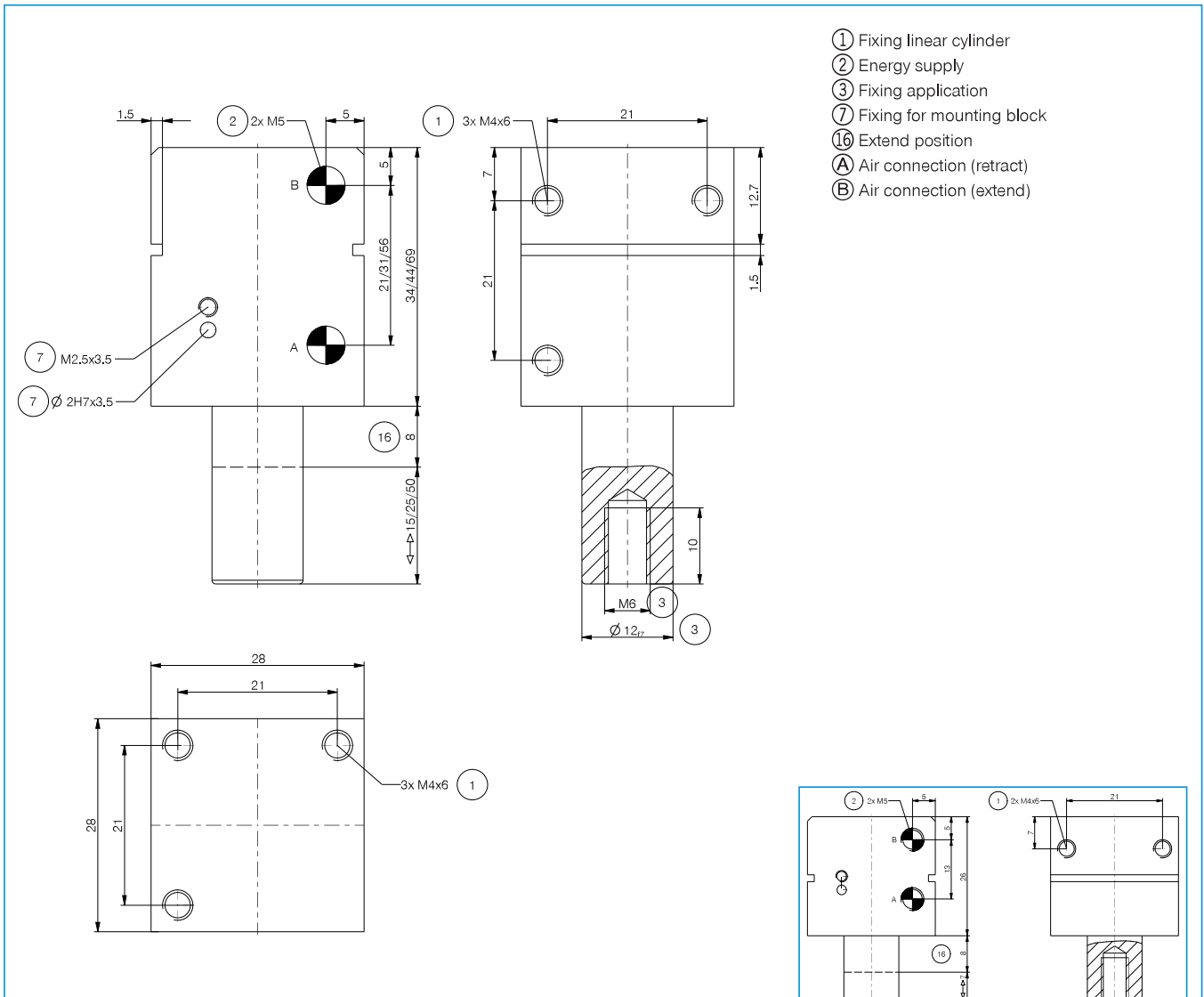


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*			
	SH-X7	SH-X15	SH-X25	SH-X50
Stroke [mm]	7	15	25	50
Retraction force [N]	100	100	100	100
Extension time [ms]	5	15	34	65
Retraction time [ms]	7.5	24	60	124
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80
Air volume per cycle [cm ³]	1.7	3.4	13.4	30
Weight [kg]	0.09	0.1	0.13	0.18

*All data measured at 6 bar



LINEAR CYLINDERS

INSTALLATION SIZE SH-XD

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Mounting block

KB3M



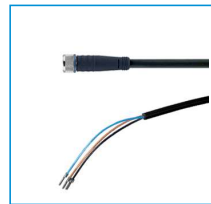
Inductive proximity switch
- Cable 5 m

NJ3-E2



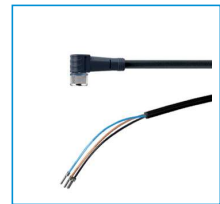
Inductive Proximity Switch
Cable 0,3 m - Connector
M8

NJ3-E2SK



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector customiz-
able Straight - Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRVM5X4

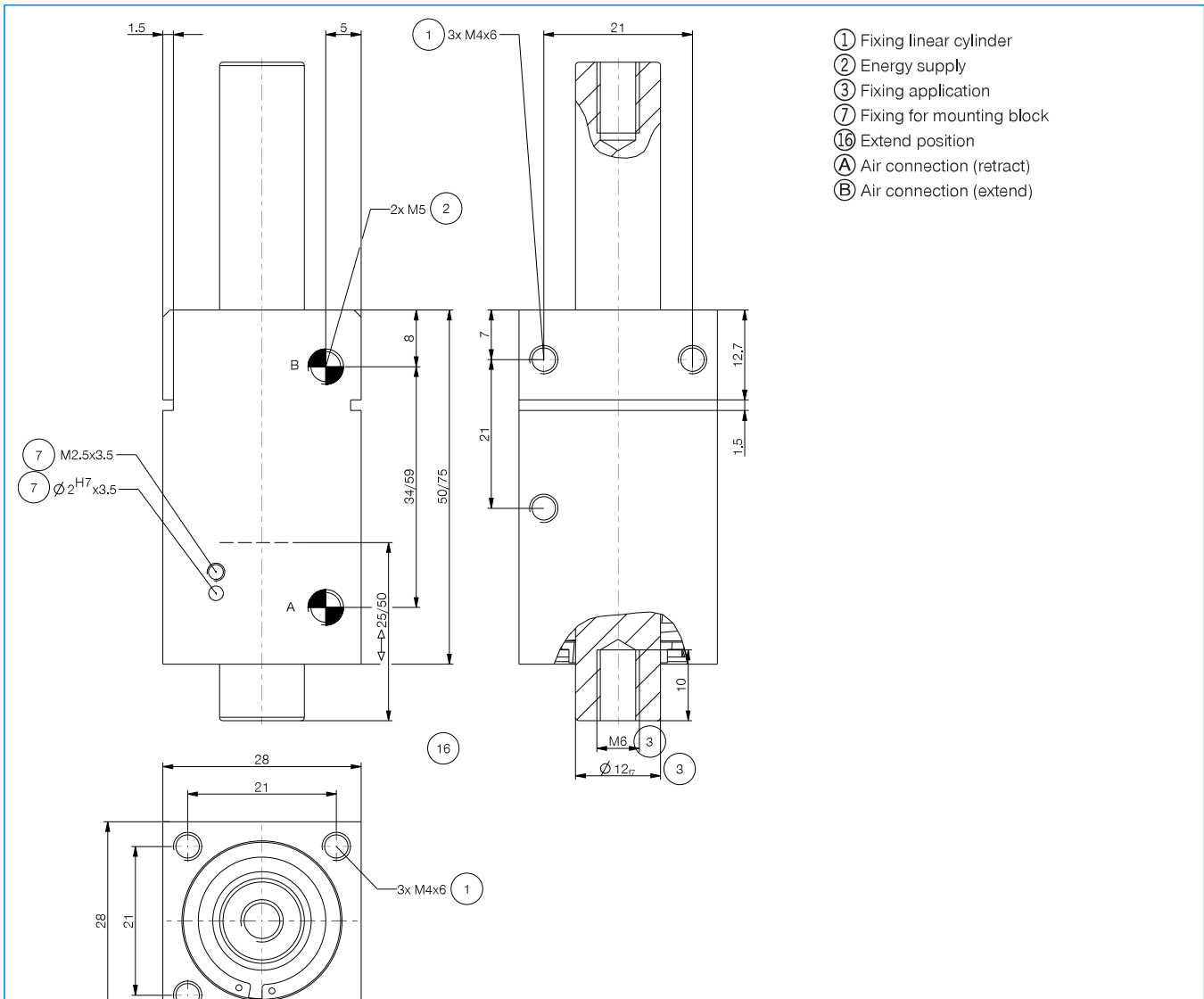


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	SH-XD25	SH-XD50
Stroke [mm]	25	50
Retraction force [N]	100	100
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	12	25
Weight [kg]	0.19	0.27

*All data measured at 6 bar



LINEAR CYLINDERS

SERIES LI

▶ PRODUCT ADVANTAGES



▶ Large locating flange

The large mounting surface simplifies your design and allows secure attachment of follow-on tools

▶ Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

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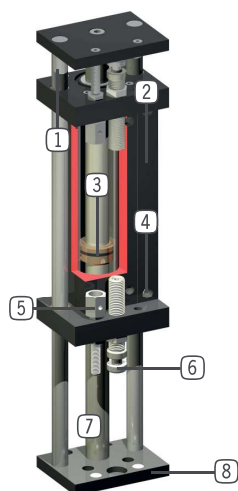
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	LI40	<input type="checkbox"/>		
3 way guiding, continuous piston rod		D		
2 way guiding		S		



► BENEFITS IN DETAIL



- ① **Guide rod**
 - hardened, polished steel shaft
- ② **Mounting block**
 - mounting for inductive proximity switch
- ③ **Drive**
 - double-acting pneumatic cylinder
- ④ **Energy supply**
 - reducing exhaust air is recommended
- ⑤ **End stop confirmation screw**
 - direct flange position sensing
 - included in scope of delivery
- ⑥ **End position damping**
 - with elastomer absorber or patented hydraulic shock absorber
- ⑦ **Piston rod**
 - polished, hard chrome plated steel
 - continuous in design D
- ⑧ **Intake flange**
 - for connection to application-specific adapter plate (to be supplied by the customer)

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

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Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



LINEAR CYLINDERS

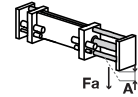
INSTALLATION SIZE LI16

▶ PRODUCT SPECIFICATIONS

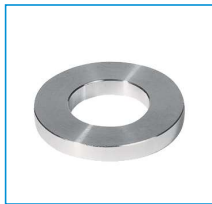


▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



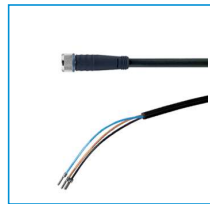
Centering Disc

ZE12H7X4

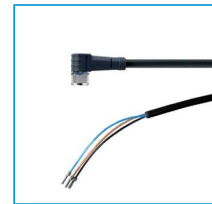


Inductive proximity switch
- Connector M8

NJ8-E2S



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Flow Control Valves - with
Swivel joint

DRVM5X4

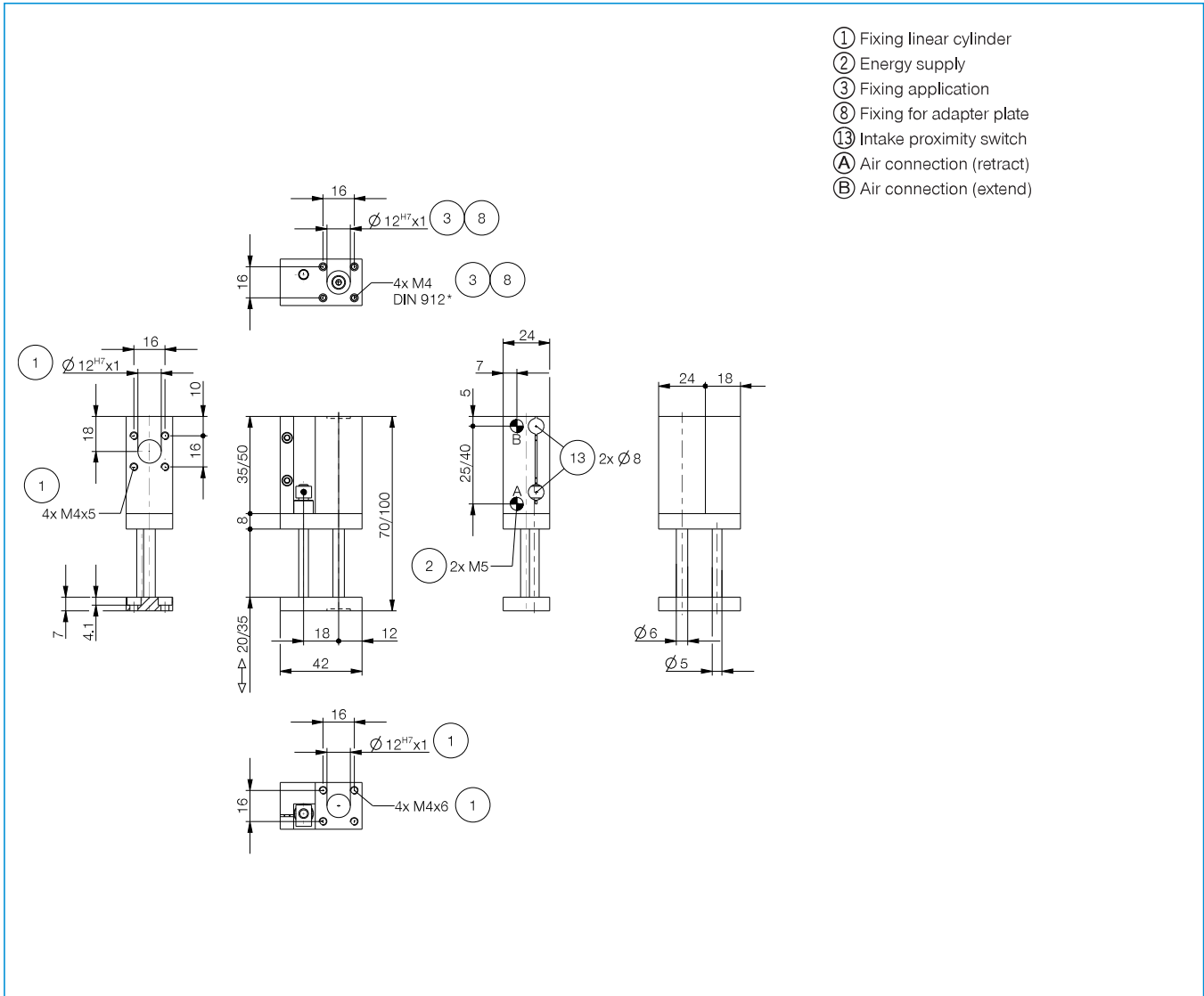


Adapter plate

AP16

Order no.	▶ Technical Data*	
	LI16-20	LI16-35
Stroke [mm]	20	35
Pressure force max. [N]	100	100
Retraction force [N]	80	80
Travel time without external load [s]	0.04	0.07
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm ³]	5	13
Weight [kg]	0.15	0.18
Load Fa max. [N]	25	15
Max. deflection A [mm]	0.05	0.05

*All data measured at 6 bar



LINEAR CYLINDERS

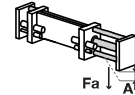
INSTALLATION SIZE LI16D

▶ PRODUCT SPECIFICATIONS

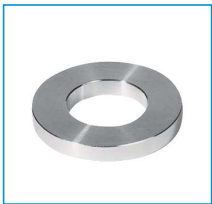


▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Centering Disc

ZE12H7X4

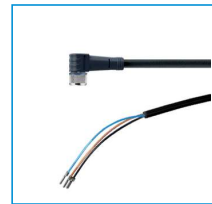


Inductive proximity switch
- Connector M8

NJ8-E2S



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Flow Control Valves - with
Swivel joint

DRVM5X4

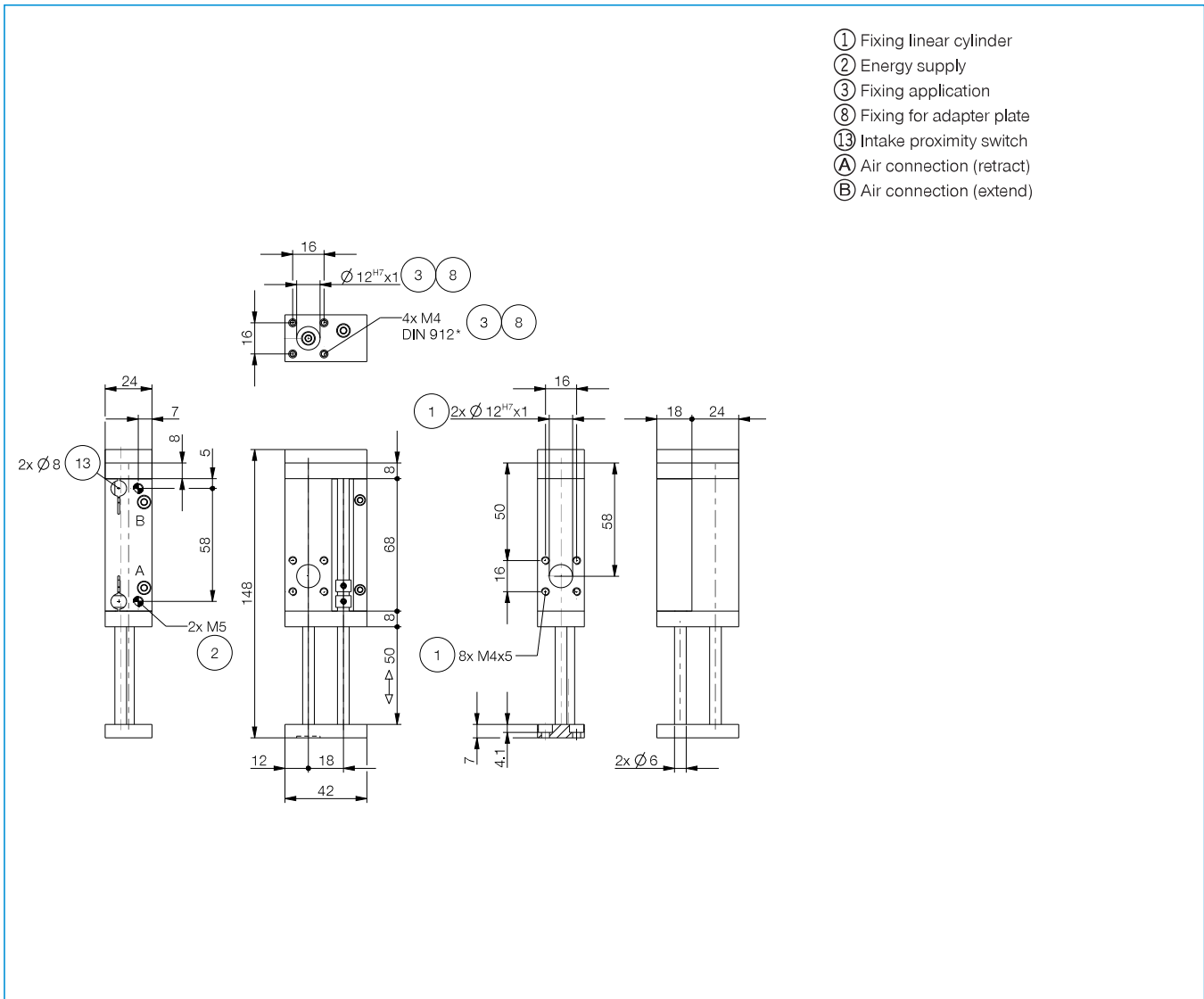


Adapter plate

AP16

Order no.	LI16-50D
Stroke [mm]	50
Pressure force max. [N]	80
Retraction force [N]	80
Travel time without external load [s]	0.1
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	15
Weight [kg]	0.3
Load Fa max. [N]	40
Max. deflection A [mm]	0.1

*All data measured at 6 bar



LINEAR CYLINDERS

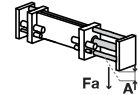
LI30-15 / LI30-30

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Absorber intake

HV30



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc

ZE20H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Flow Control Valves - with Swivel joint

DRVM5X4

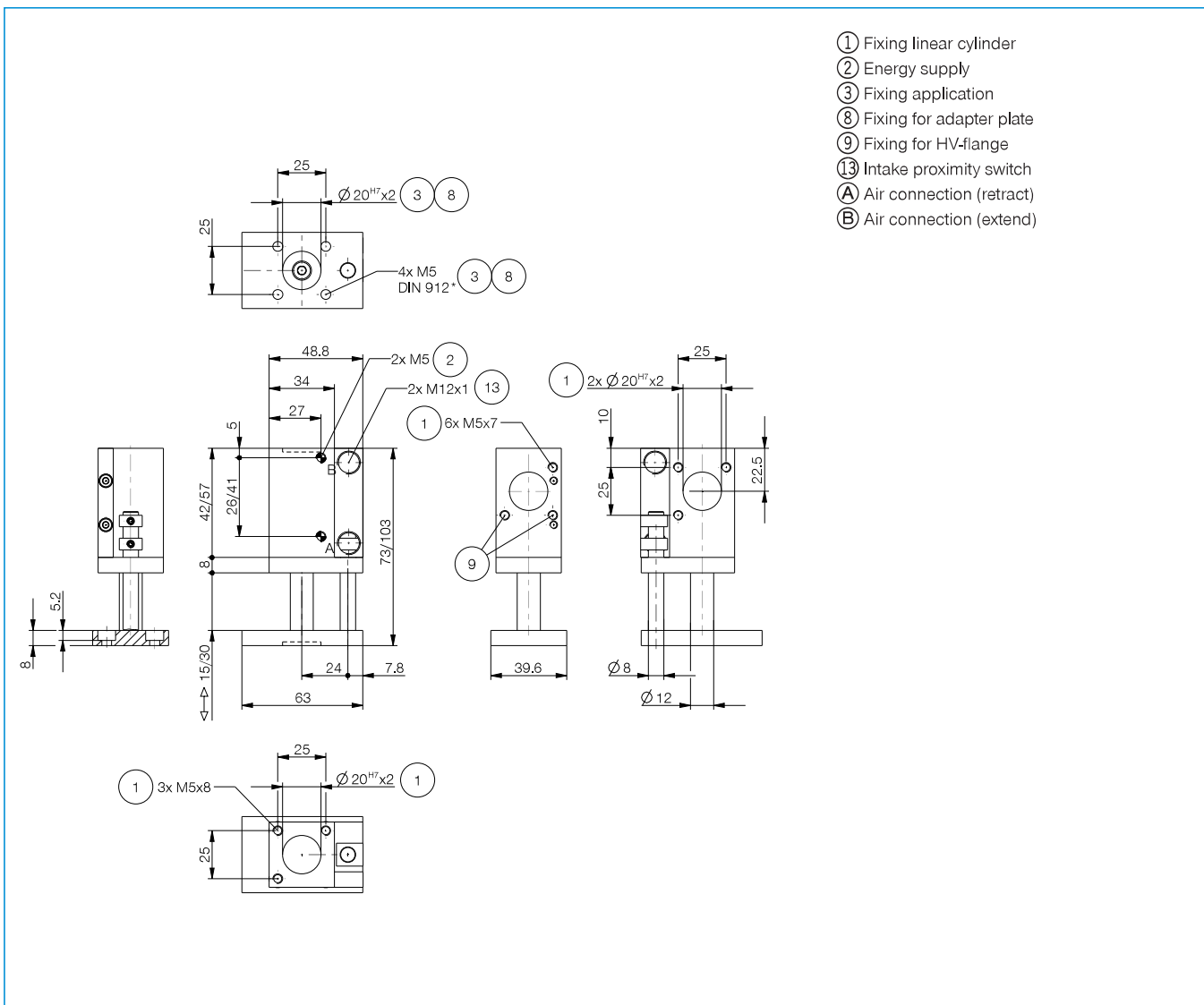


Adapter plate

AP30

Order no.	Technical Data*	
	LI30-15	LI30-30
Stroke [mm]	15	30
Pressure force max. [N]	270	270
Retraction force [N]	200	200
Travel time without external load [s]	0.06	0.14
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm ³]	12	25
Weight [kg]	0.3	0.36
Load Fa max. [N]	70	50
Max. deflection A [mm]	0.05	0.05

*All data measured at 6 bar



LINEAR CYLINDERS

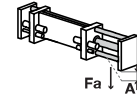
LI30-60 / LI30-90

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Absorber intake

HV30



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc

ZE20H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Flow Control Valves - with Swivel joint

DRVM5X4

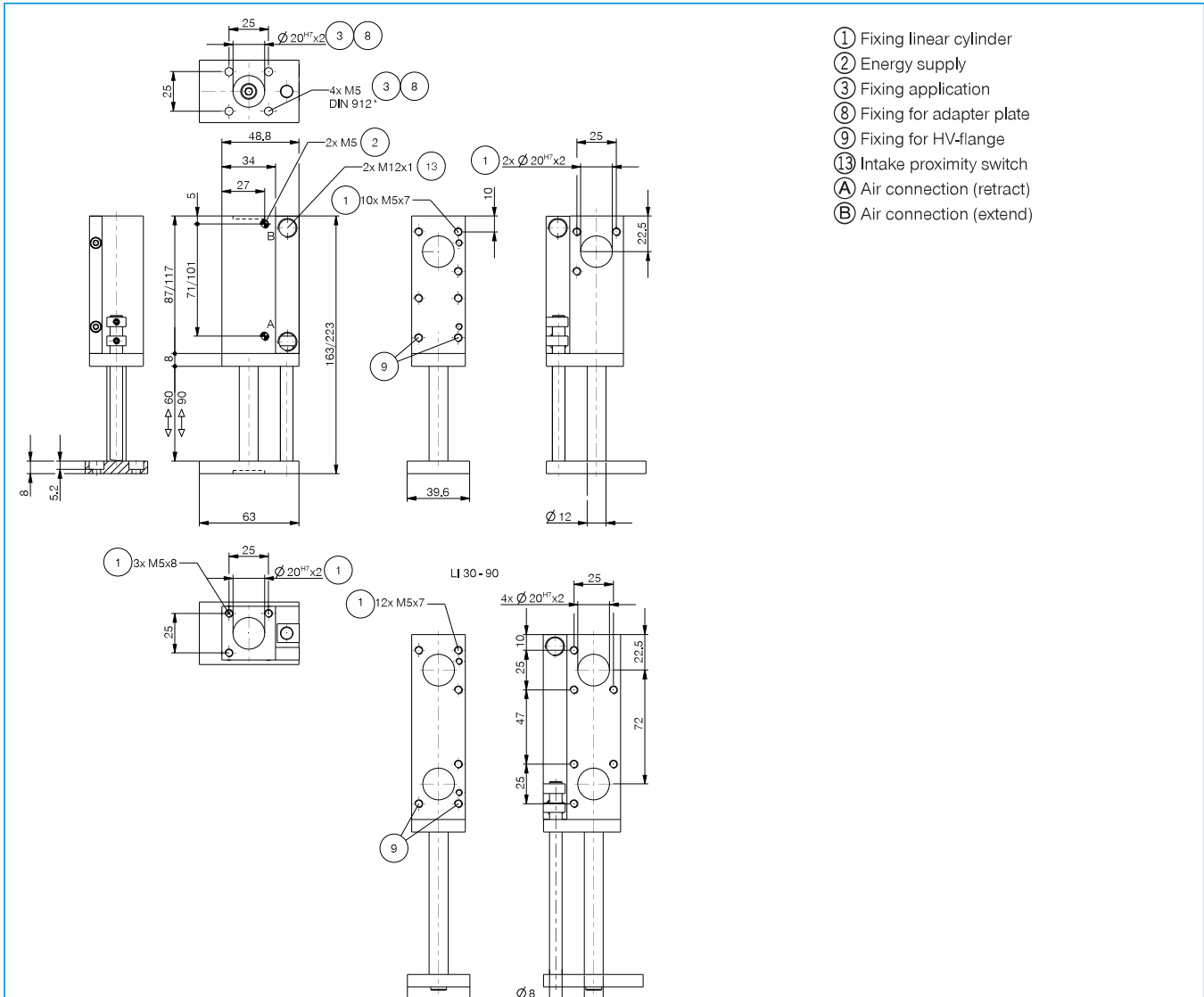


Adapter plate

AP30

Order no.	► Technical Data*	
	LI30-60	LI30-90
Stroke [mm]	60	90
Pressure force max. [N]	270	270
Retraction force [N]	200	200
Travel time without external load [s]	0.25	0.26
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm ³]	50	92
Weight [kg]	0.46	0.56
Load Fa max. [N]	30	20
Max. deflection A [mm]	0.05	0.05

*All data measured at 6 bar



LINEAR CYLINDERS

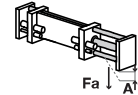
INSTALLATION SIZE LI30D

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Absorber intake

HV30



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc

ZE20H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Flow Control Valves - with Swivel joint

DRVM5X4

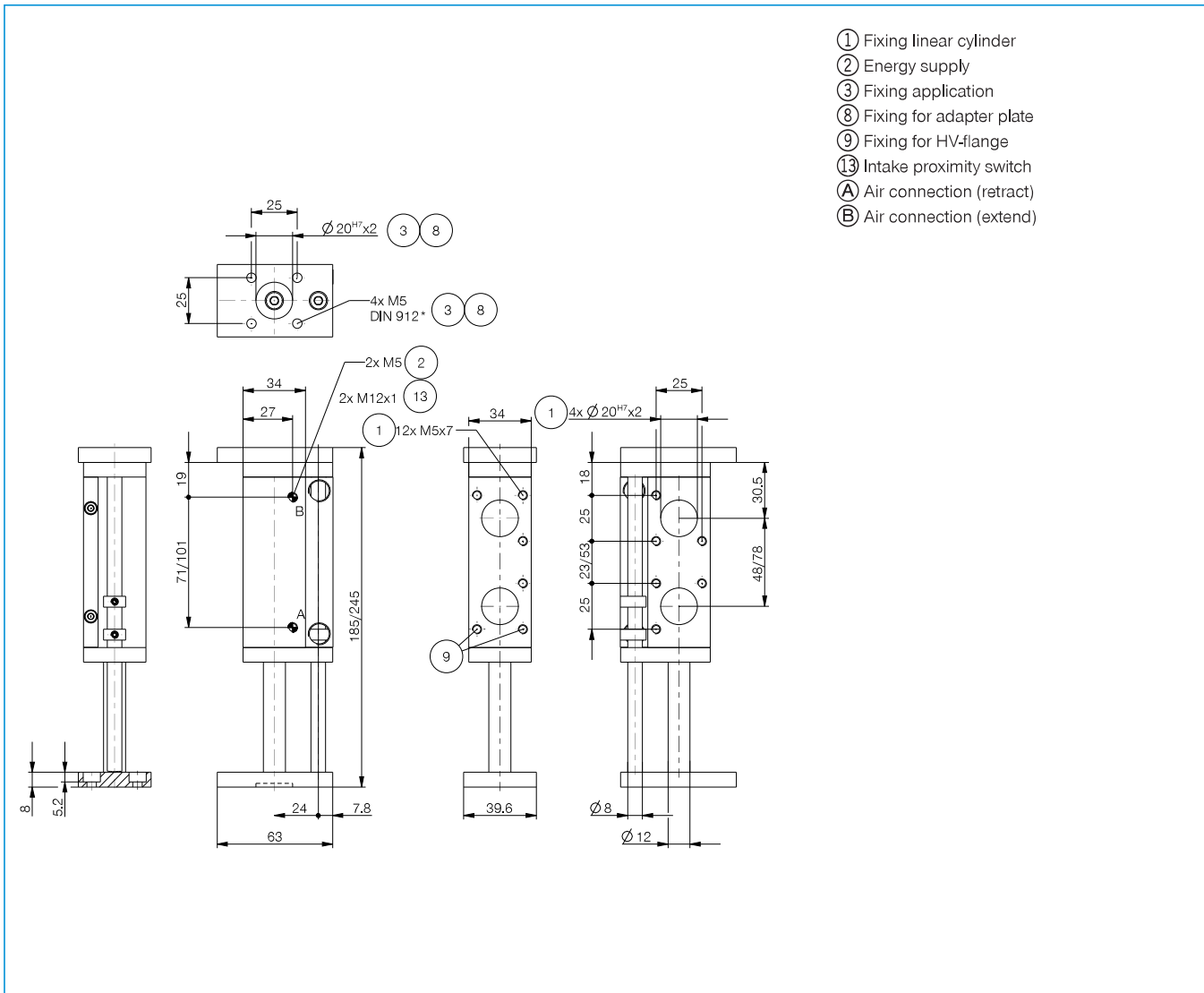


Adapter plate

AP30

Order no.	▶ Technical Data*	
	LI30-60D	LI30-90D
Stroke [mm]	60	90
Pressure force max. [N]	200	200
Retraction force [N]	200	200
Travel time without external load [s]	0.21	0.25
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm ³]	50	66
Weight [kg]	0.7	0.85
Load Fa max. [N]	80	60
Max. deflection A [mm]	0.1	0.1

*All data measured at 6 bar



LINEAR CYLINDERS

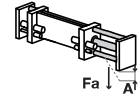
INSTALLATION SIZE LI40

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Absorber intake

HV40



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc

ZE20H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Flow Control Valves - with Swivel joint

DRVM5X4



Adapter plate

AP40

LINEAR CYLINDERS

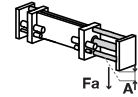
LI40-90S / LI40-130S / LI40-160S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

AD-M14X1.5



Shock Absorbers

M14X1.5S



Centering Disc

ZE30H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector
Straight Cable 5m - Socket
M8 (female)
KAG500



Plug-in connector Angled Cable
5m - Socket M8 (female)

KAW500



Flow Control Valves - with
Swivel joint

DRV1-8X6



Stop Stroke Adjustment
Screws

AI-M8X1-53

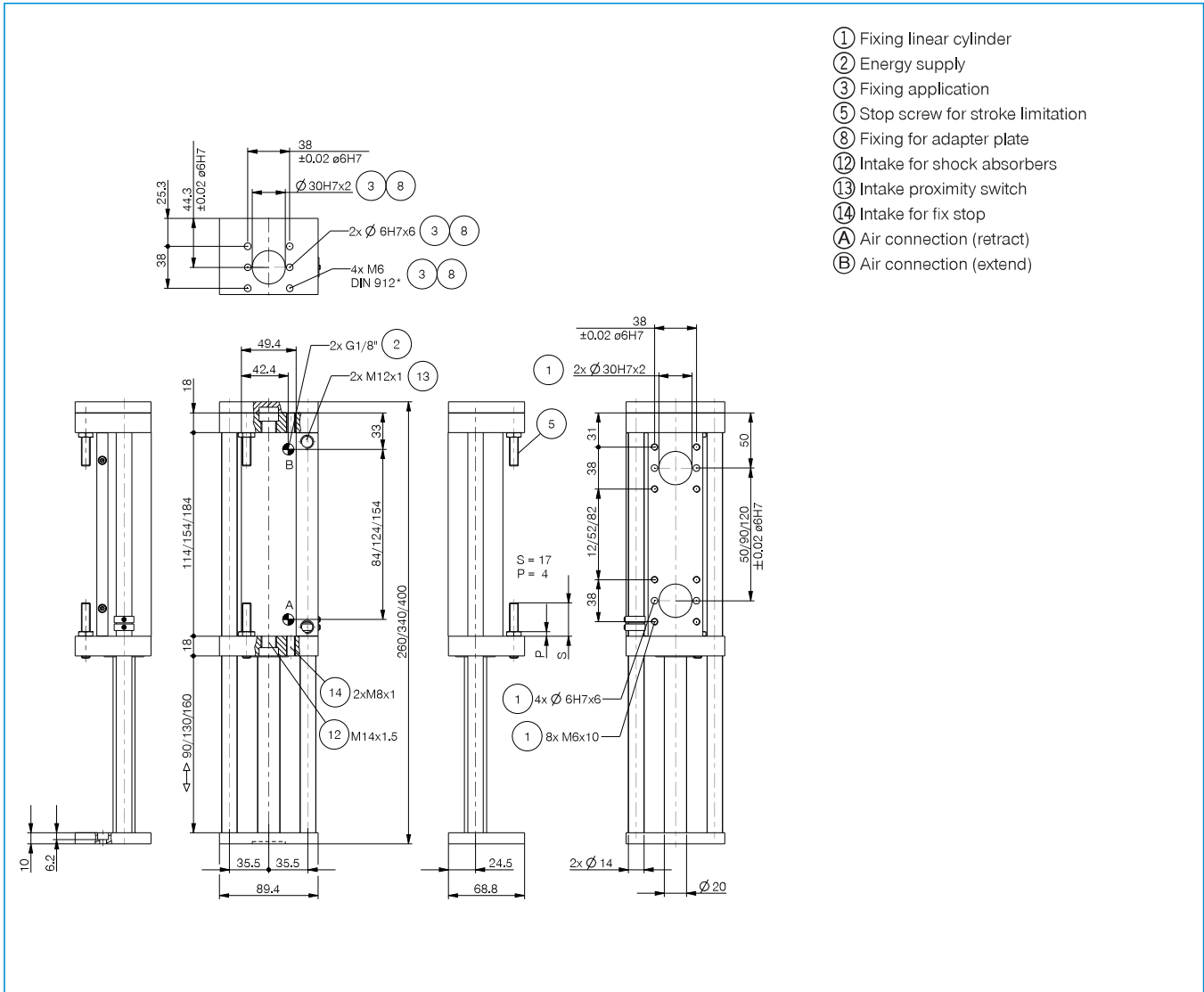


Adapter plate

AP40-S

Order no.	► Technical Data*		
	LI40-90S	LI40-130S	LI40-160S
Stroke [mm]	90	130	160
Pressure force max. [N]	270	270	270
Retraction force [N]	270	270	270
Travel time without external load [s]	0.09	0.13	0.16
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm ³]	100	133	166
Weight [kg]	2.9	3.5	3.9
Load Fa max. [N]	300	230	150
Max. deflection A [mm]	0.09	0.13	0.16
Radial load Mr max. [Ncm]	600	400	320
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1

*All data measured at 6 bar



LINEAR CYLINDERS

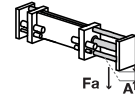
LI40-200S / LI40-250S / LI40-300S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



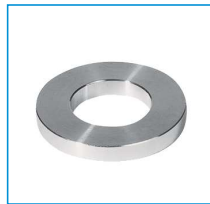
Shock Absorbers

AD-M14X1.5



Shock Absorbers

M14X1.5S



Centering Disc

ZE30H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector
Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Flow Control Valves - with Swivel joint

DRV1-8X6



Stop Stroke Adjustment Screws

AI-M8X1-53



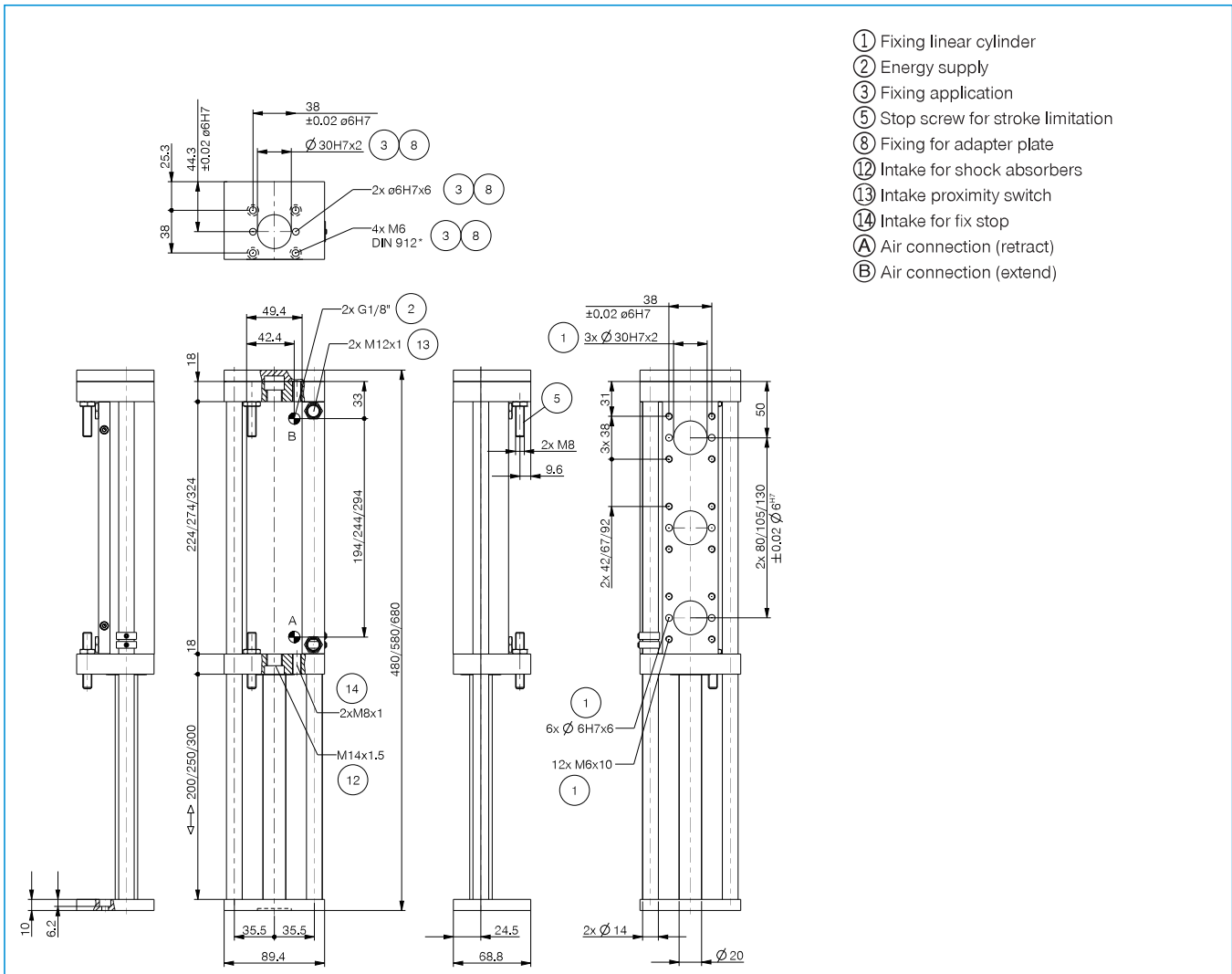
Adapter plate

AP40-S

► Technical Data*

Order no.	LI40-200S	LI40-250S	LI40-300S
Stroke [mm]	200	250	300
Pressure force max. [N]	270	270	270
Retraction force [N]	270	270	270
Travel time without external load [s]	0.22	0.28	0.4
Radial load Mr max. [Ncm]	230	130	100
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	216	266	316
Weight [kg]	4.5	5.2	5.9
Load Fa max. [N]	120	90	65
Max. deflection A [mm]	0.2	0.25	0.3

*All data measured at 6 bar



LINEAR CYLINDERS

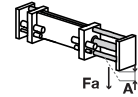
LI50-50S / LI50-90S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.

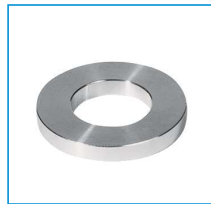


▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



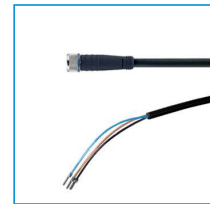
Centering Disc

ZE30H7X4

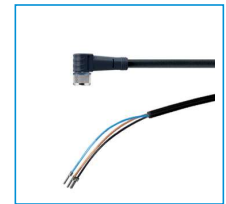


Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Flow Control Valves - with
Swivel joint

DRV1-8X6



Stop Stroke Adjustment
Screws

AI-M8X1-53



Adapter plate

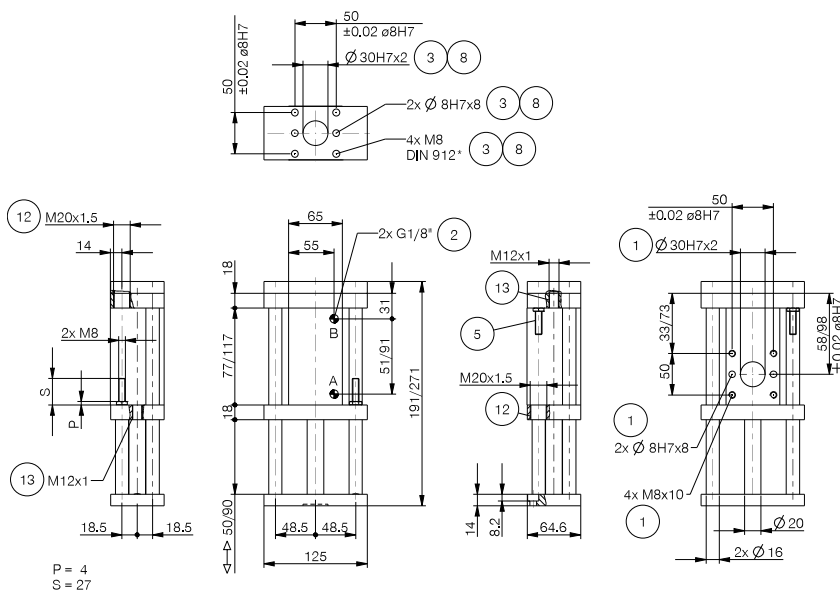
AP50-S

► Technical Data*

Order no.	LI50-50S	LI50-90S
Stroke [mm]	50	90
Pressure force max. [N]	950	950
Retraction force [N]	950	950
Travel time without external load [s]	0.13	0.24
Radial load Mr max. [Ncm]	1500	1100
Max. rotation D at 100 mm [mm]	0.08	0.08
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	166	300
Weight [kg]	2.9	3.6
Load Fa max. [N]	300	200
Max. deflection A [mm]	0.03	0.05

*All data measured at 6 bar

- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑧ Fixing for adapter plate
- ⑫ Intake for shock absorbers
- ⑬ Intake proximity switch
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)



LINEAR CYLINDERS

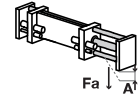
LI50-130S / LI50-160S / LI50-200S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.

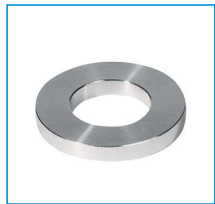


▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



Centering Disc

ZE30H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Flow Control Valves - with
Swivel joint

DRV1-8X6



Stop Stroke Adjustment
Screws

AI-M8X1-53



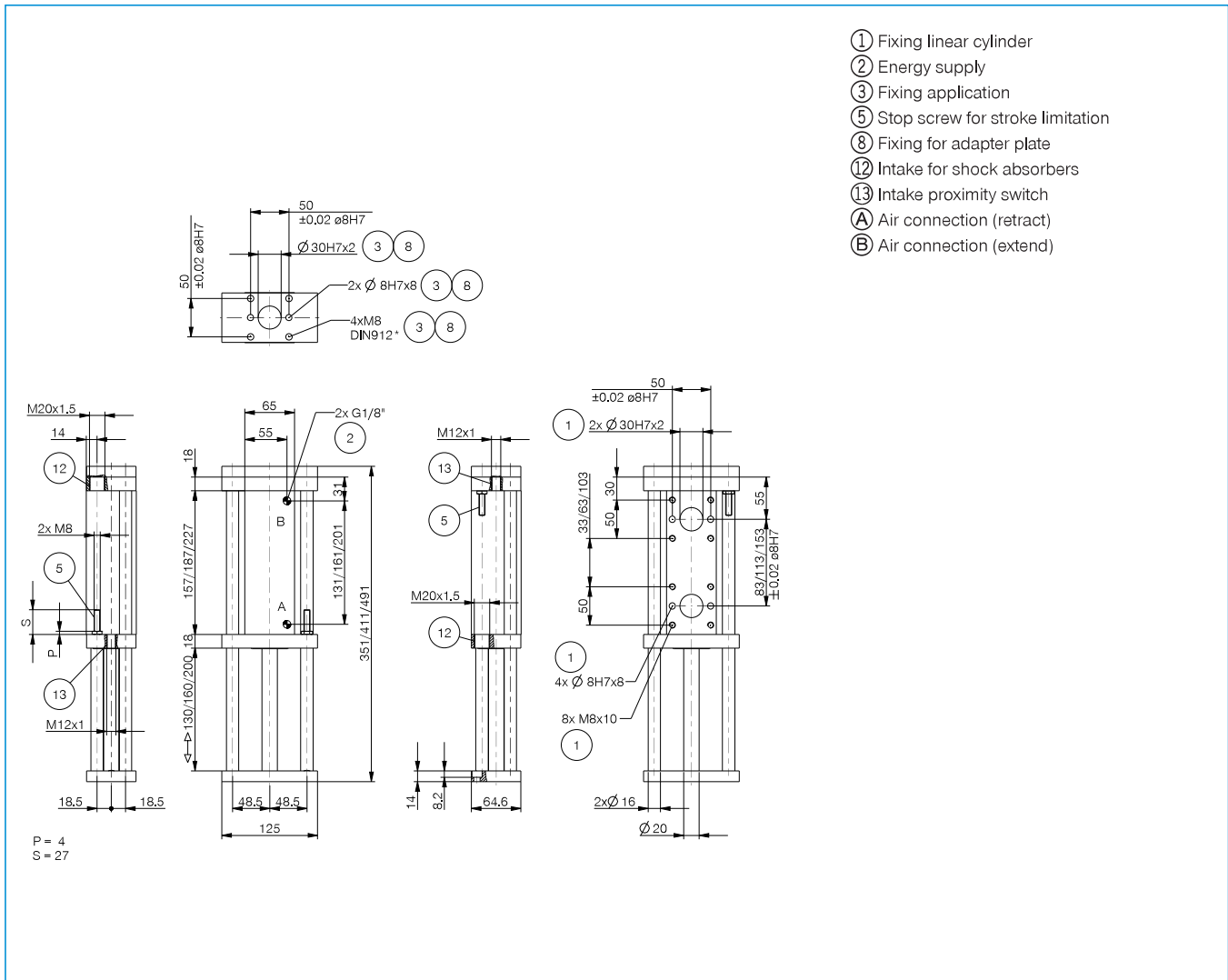
Adapter plate

AP50-S

► Technical Data*

Order no.	LI50-130S	LI50-160S	LI50-200S
Stroke [mm]	130	160	200
Pressure force max. [N]	950	950	950
Retraction force [N]	950	950	950
Travel time without external load [s]	0.34	0.42	0.48
Radial load Mr max. [Ncm]	900	750	400
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	433	533	666
Weight [kg]	4.4	4.8	5.5
Load Fa max. [N]	130	100	90
Max. deflection A [mm]	0.05	0.08	0.1

*All data measured at 6 bar



LINEAR CYLINDERS

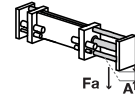
LI50-250S / LI50-300S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.

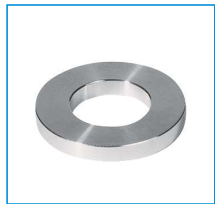


▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



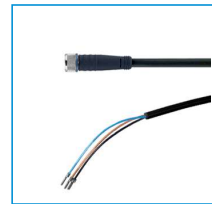
Centering Disc

ZE30H7X4



Inductive proximity switch
- Connector M8

NJ12-E2S



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Flow Control Valves - with
Swivel joint

DRV1-8X6



Stop Stroke Adjustment
Screws

AI-M8X1-53



Adapter plate

AP50-S

LINEAR RAIL SLIDES

OVERVIEW OF SERIES

**▶ PNEUMATIC**

Series LS

750



Series LSF

760

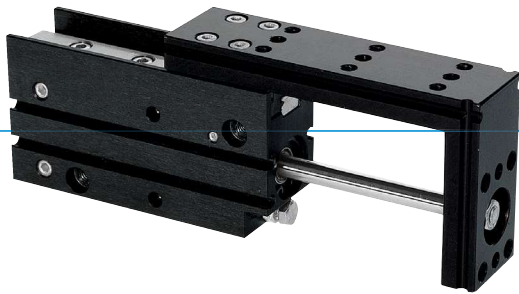


Series LSX

766

LINEAR RAIL SLIDES SERIES LS

▶ PRODUCT ADVANTAGES



▶ **Precise profile guide**

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

▶ **Standardised adapter plate**

Reduce your manufacturing effort and ensure standardisation for your follow-on tools

▶ **Modular layout**

Makes it possible to combine several units directly to each other and to minimise your design effort

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

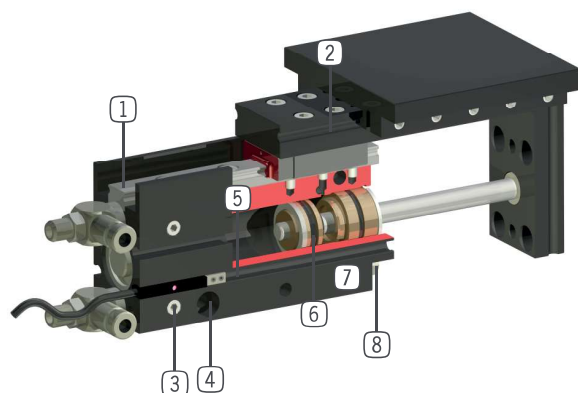
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Linear guide with recirculating ball and wiper**
 - dual linear guidance for high forces and moments capacity
- ② **Mounting groove**
 - quick and cost-effective positioning of adapter plates: Accessory, Art. No. AP...G
- ③ **Energy supply**
 - possible from several sides
- ④ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑤ **Mounting groove for magnetic field sensor integrated, space saving position sensing**
- ⑥ **Drive**
 - double-acting pneumatic cylinder
- ⑦ **Robust, lightweight housing**
 - Hard-coated aluminum alloy
- ⑧ **Stroke limiting screw**

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



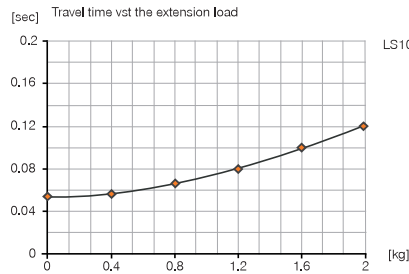
LINEAR RAIL SLIDES

LS10-25

▶ PRODUCT SPECIFICATIONS

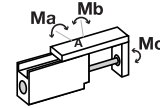


▶ Time diagram



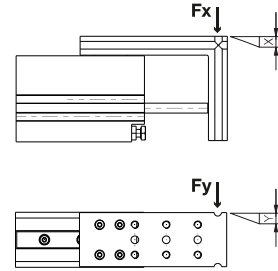
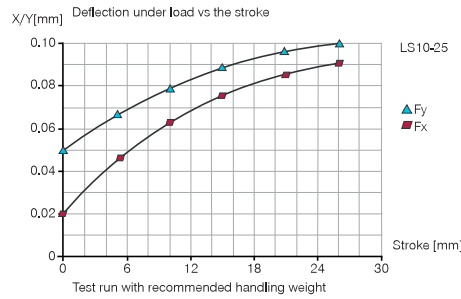
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	3.2
Mb [Nm]	3.2
Mc [Nm]	5.1

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



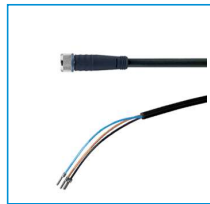
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



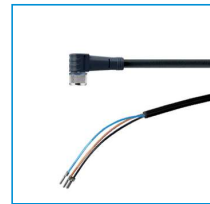
Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV3M3X4



Pressure Safety Valve

DSV1-8



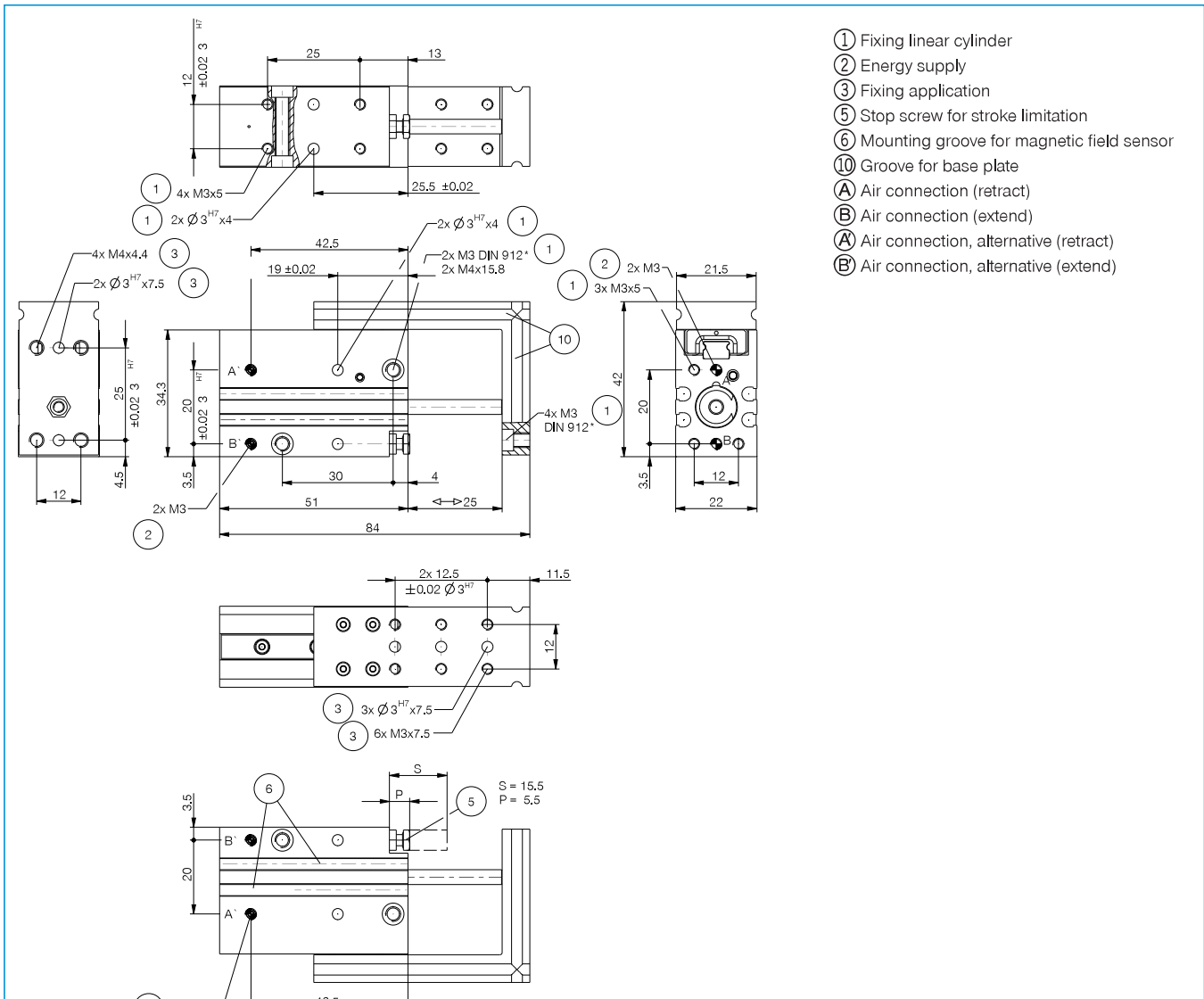
Adapter plate

APLS10G

► Technical Data*

Order no.	LS10-25
Stroke [mm]	25
Pressure force max. [N]	40
Retraction force [N]	30
Piston diameter [mm]	10
Guide rail size [mm]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	3.6
Weight [kg]	0,15

*All data measured at 6 bar



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- A Air connection (retract)
- B Air connection (extend)
- A' Air connection, alternative (retract)
- B' Air connection, alternative (extend)

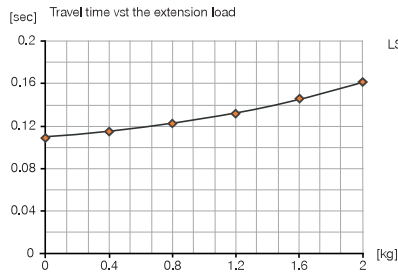
LINEAR RAIL SLIDES

LS10-50

▶ PRODUCT SPECIFICATIONS

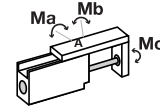


▶ Time diagram



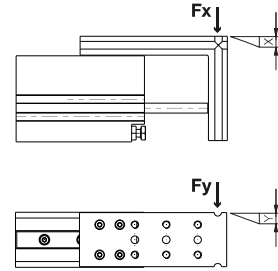
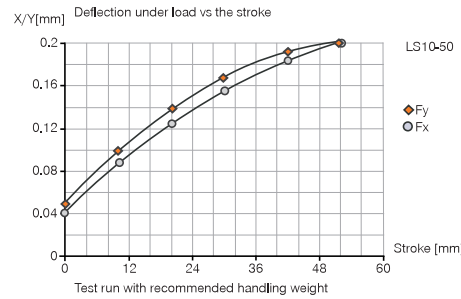
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	3.2
Mb [Nm]	3.2
Mc [Nm]	5.1

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



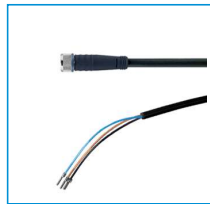
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



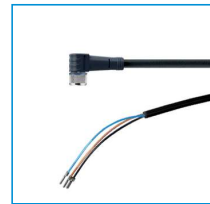
Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV3M3X4



Pressure Safety Valve

DSV1-8

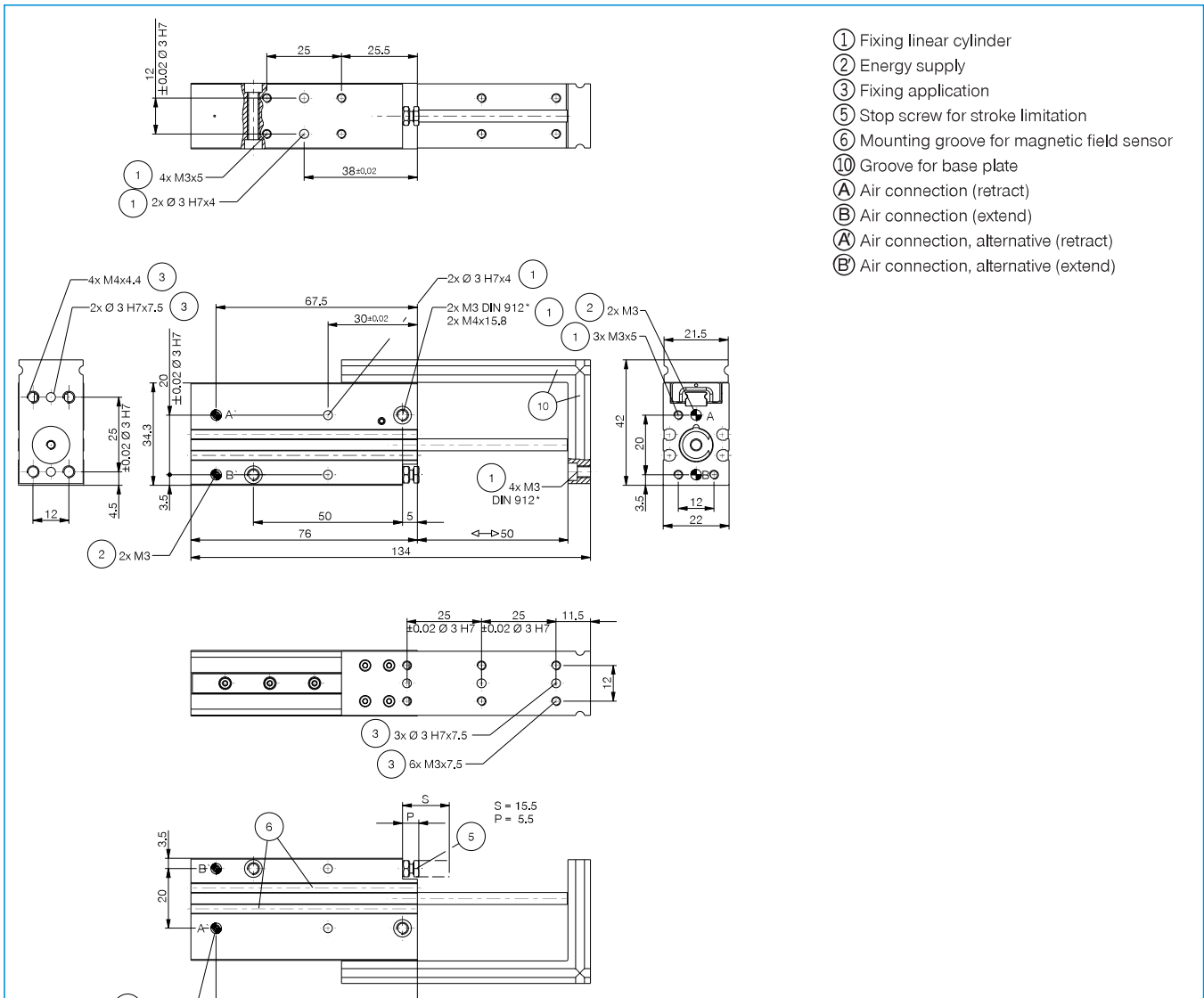


Adapter plate

APLS10G

Order no.	▶ Technical Data*
Stroke [mm]	50
Pressure force max. [N]	40
Retraction force [N]	30
Piston diameter [mm]	10
Guide rail size [mm]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	7.2
Weight [kg]	0,2

*All data measured at 6 bar



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- A Air connection (retract)
- B Air connection (extend)
- A Air connection, alternative (retract)
- B Air connection, alternative (extend)

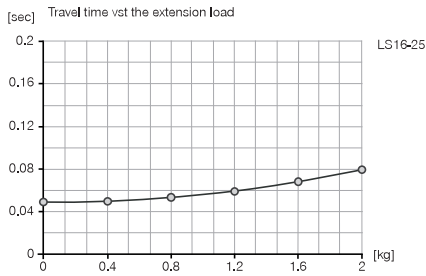
LINEAR RAIL SLIDES

LS16-25

▶ PRODUCT SPECIFICATIONS

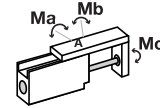


▶ Time diagram



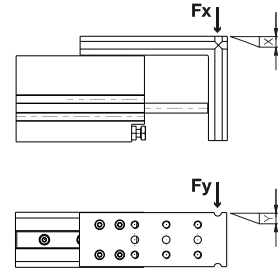
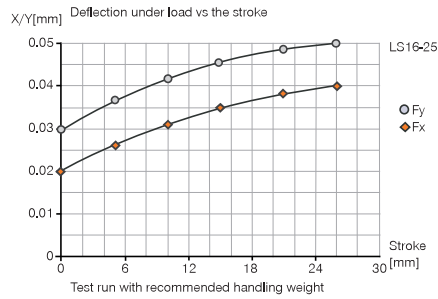
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	6.4
Mb [Nm]	6.4
Mc [Nm]	9.6

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector
customizable Straight -
Connector M12
S12-G-3



Flow Control Valves - with
Swivel joint
DRVM5X4



Pressure Safety Valve

DSV1-8

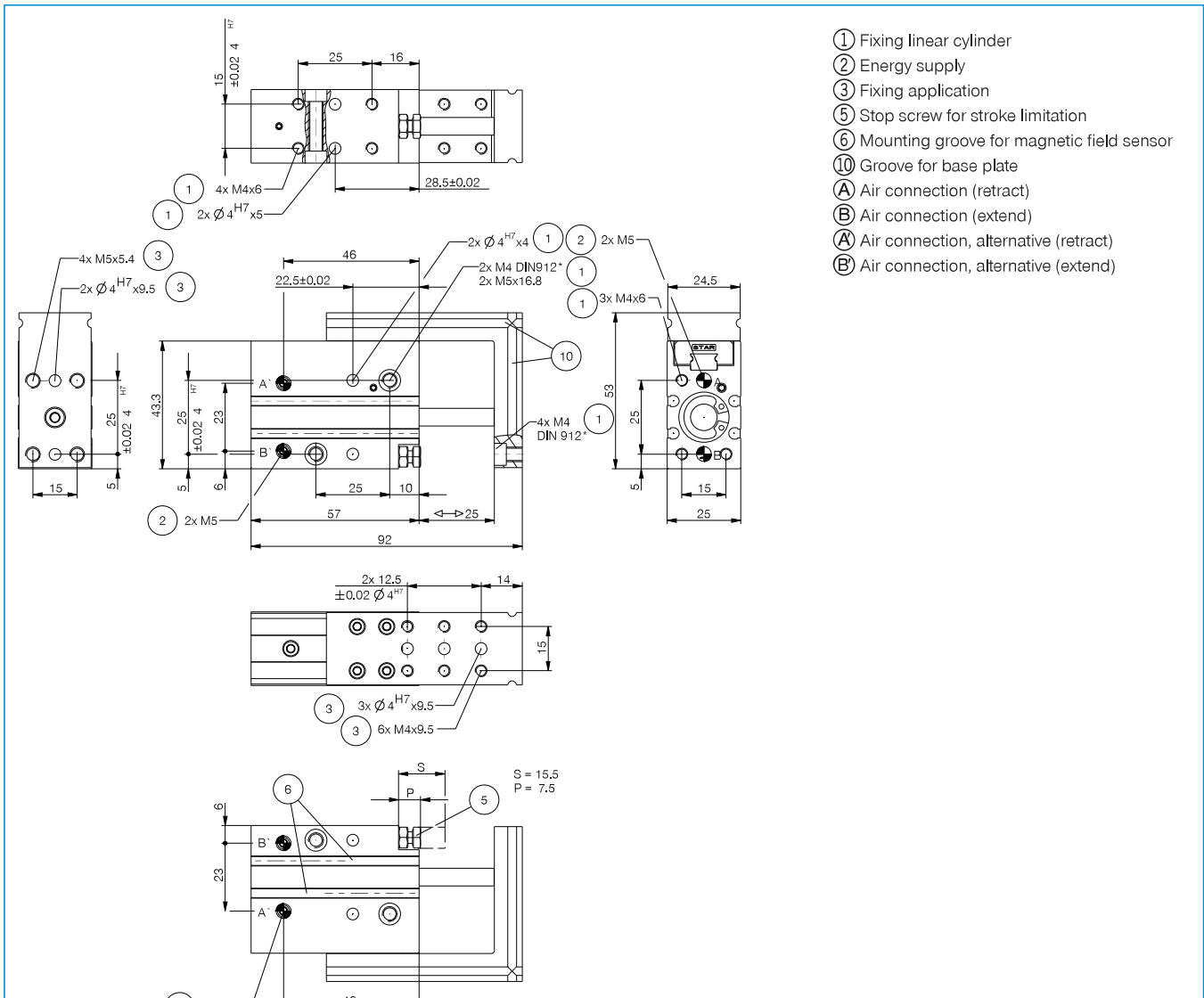


Adapter plate

APLS16G

Order no.	▶ Technical Data*
Stroke [mm]	25
Pressure force max. [N]	100
Retraction force [N]	85
Piston diameter [mm]	16
Guide rail size [mm]	9
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	9.6
Weight [kg]	0,25

*All data measured at 6 bar



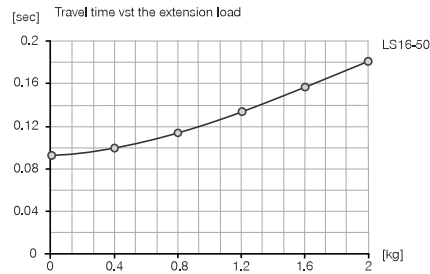
LINEAR RAIL SLIDES

LS16-50

▶ PRODUCT SPECIFICATIONS

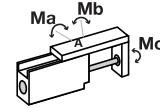


▶ Time diagram



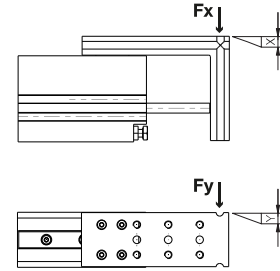
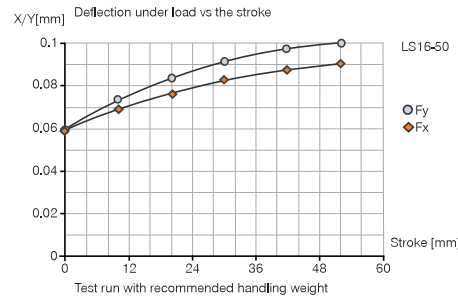
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	6.4
Mb [Nm]	6.4
Mc [Nm]	9.6

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector
customizable Straight -
Connector M12
S12-G-3



Flow Control Valves - with
Swivel joint
DRV5X4



Pressure Safety Valve

DSV1-8

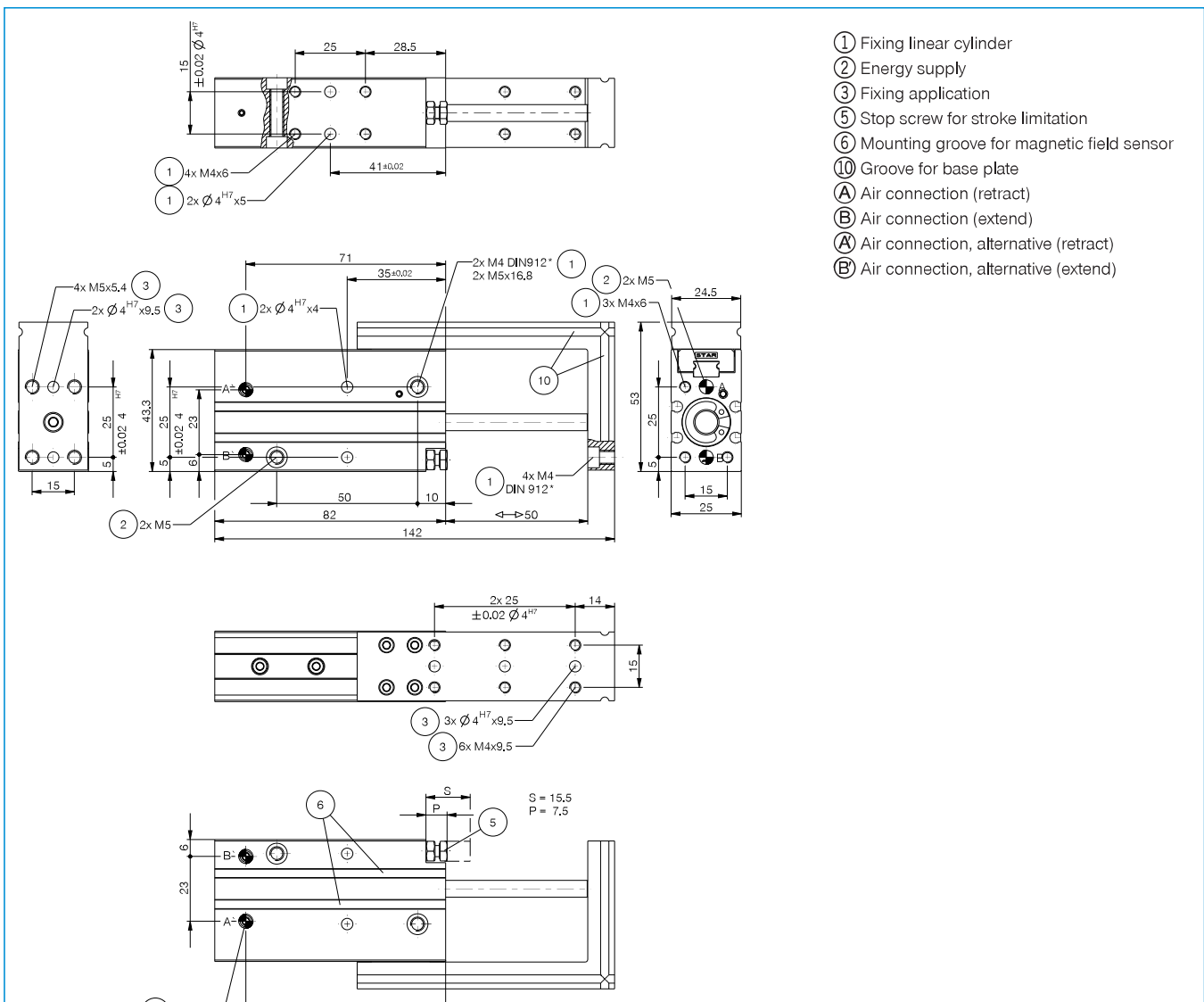


Adapter plate

APLS16G

Order no.	▶ Technical Data*
Stroke [mm]	50
Pressure force max. [N]	100
Retraction force [N]	85
Piston diameter [mm]	16
Guide rail size [mm]	9
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	19.2
Weight [kg]	0,3

*All data measured at 6 bar



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)
- Ⓐ Air connection, alternative (retract)
- Ⓑ Air connection, alternative (extend)

LINEAR RAIL SLIDES

SERIES LSF

▶ PRODUCT ADVANTAGES



▶ **Precise profile guide**

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

▶ **Dampened end position**

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ **Flat structure**

Reduces the interference contours for your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

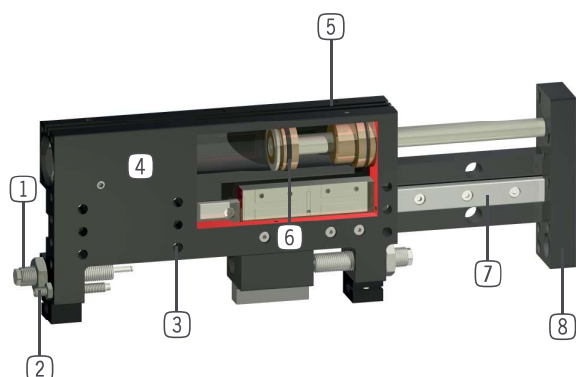
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

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► BENEFITS IN DETAIL



- ① **Patented, hydraulic shock absorber**
 - adjustable end position damping
 - included in scope of delivery
- ② **Stroke limiting screw**
- ③ **Mounting and positioning**
 - possible from several sides
- ④ **Robust, lightweight and extremely flat structure housing**
 - Hard-coated aluminum alloy
- ⑤ **Mounting groove for magnetic field sensor**
 - integrated, space saving position sensing
- ⑥ **Drive**
 - double-acting pneumatic cylinder
- ⑦ **Linear guide with recirculating ball and wiper**
 - dual linear guidance for high forces and moments capacity
- ⑧ **Intake flange**
 - simple application connection

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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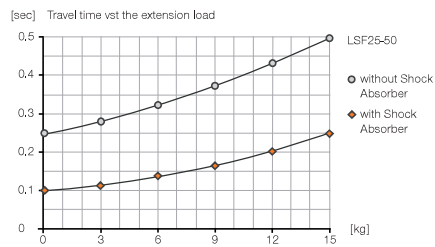
LINEAR RAIL SLIDES

LSF25-50

▶ PRODUCT SPECIFICATIONS

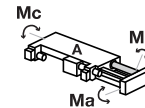


▶ Time diagram



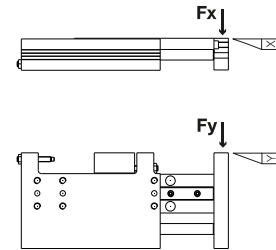
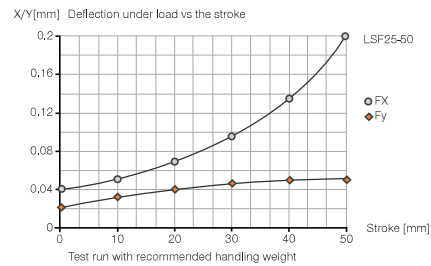
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	100
Mb [Nm]	100
Mc [Nm]	40

▶ Load diagram

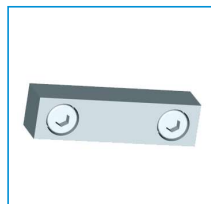


▶ RECOMMENDED ACCESSORIES



Mounting block

KB8



Switch cam + screws

SN09



Shock Absorbers

M12X1S



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



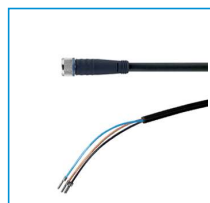
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



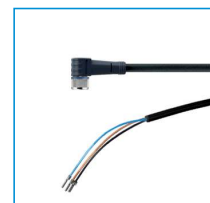
Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500

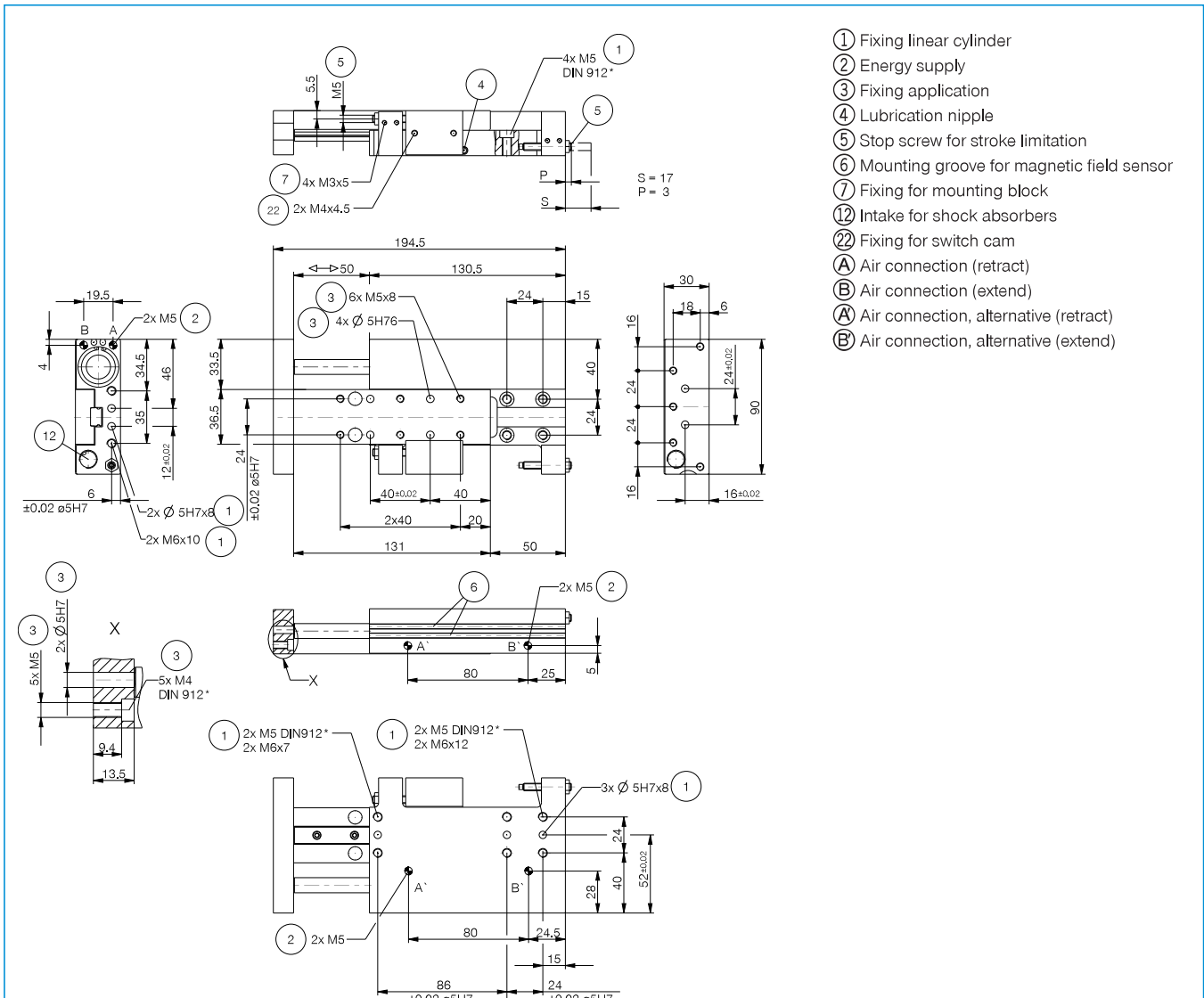


Plug-in connector customiz-
able Straight - Connector M8

S8-G-3

Order no.	▶ Technical Data*
Stroke [mm]	50
Pressure force max. [N]	265
Retraction force [N]	220
Piston diameter [mm]	25
Guide rail size [mm]	12
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	45
Weight [kg]	1

*All data measured at 6 bar



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ④ Lubrication nipple
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑫ Intake for shock absorbers
- ⑫ Fixing for switch cam
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)
- Ⓐ Air connection, alternative (retract)
- Ⓑ Air connection, alternative (extend)

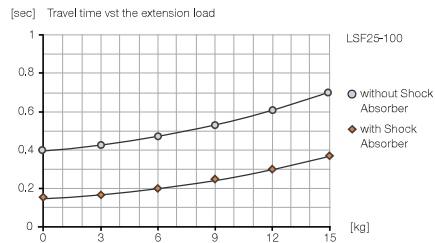
LINEAR RAIL SLIDES

LSF25-100

▶ PRODUCT SPECIFICATIONS

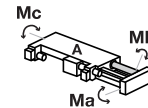


▶ Time diagram



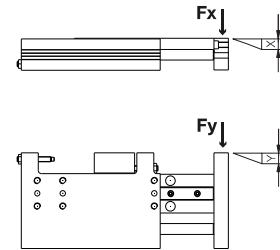
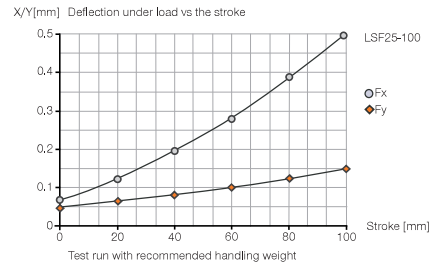
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	100
Mb [Nm]	100
Mc [Nm]	40

▶ Load diagram

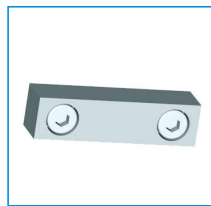


▶ RECOMMENDED ACCESSORIES



Mounting block

KB8



Switch cam + screws

SN09



Shock Absorbers

M12X1S



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



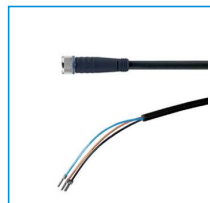
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



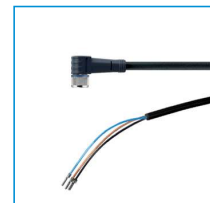
Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500

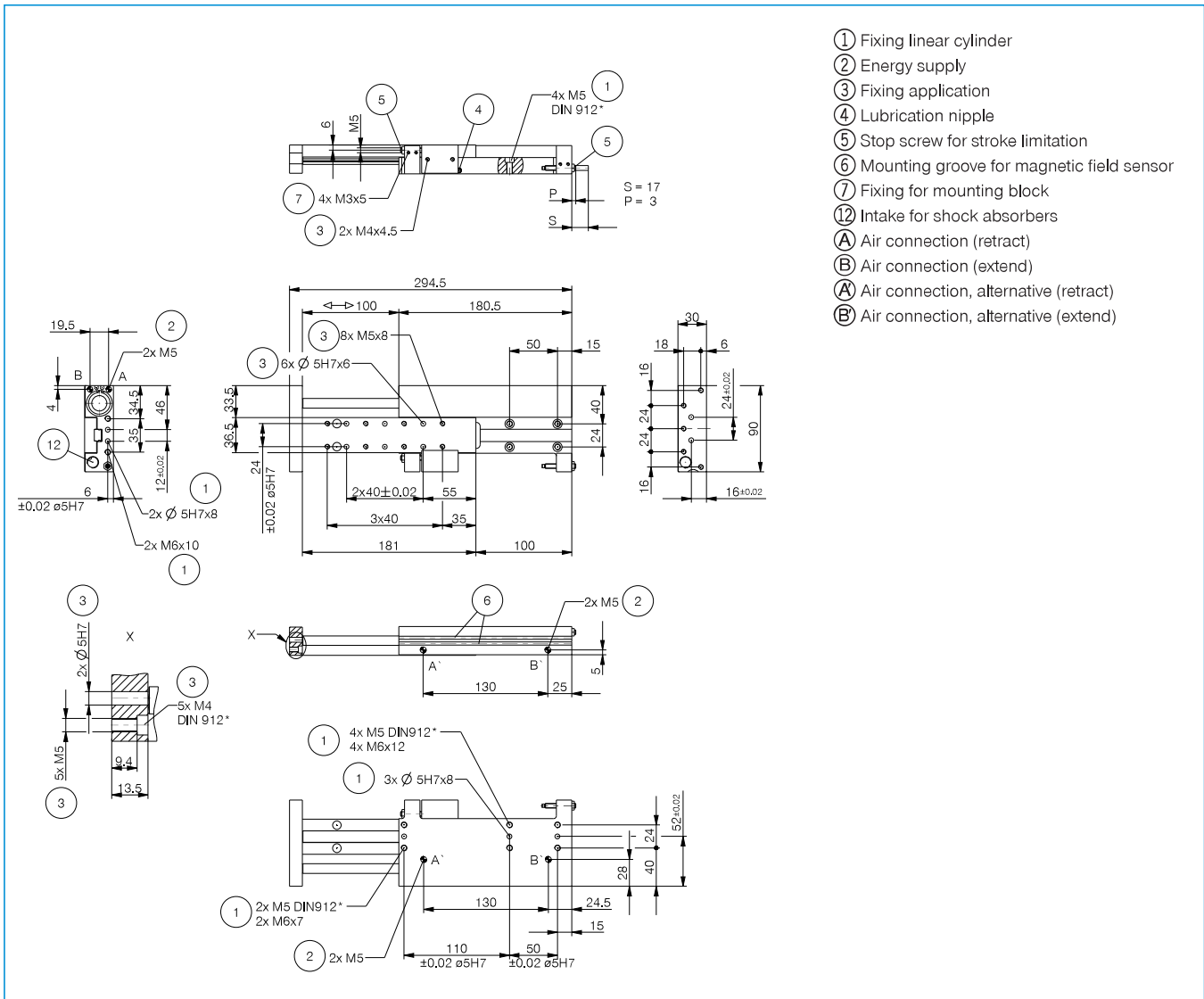


Plug-in connector customiz-
able Straight - Connector M8

S8-G-3

Order no.	LSF25-100
Stroke [mm]	100
Pressure force max. [N]	265
Retraction force [N]	220
Piston diameter [mm]	25
Guide rail size [mm]	12
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	90
Weight [kg]	1.3

*All data measured at 6 bar



LINEAR RAIL SLIDES

SERIES LSX

▶ PRODUCT ADVANTAGES



▶ **Precise double rail profile guide**

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

▶ **Dampened end position**

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ **Failure-free continuous operation**

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

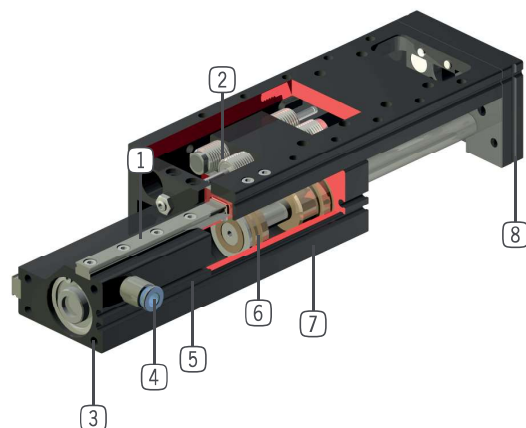
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Linear guide with recirculating ball and wiper**
 - two way linear guide for forces and moments capacity
- ② **Patented, hydraulic shock absorber**
 - adjustable end position damping
 - included in scope of delivery
- ③ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ④ **Energy supply**
 - possible from several sides
- ⑤ **Mounting groove for magnetic field sensor**
 - integrated, space saving position sensing
- ⑥ **Robust, lightweight housing**
 - Hard-coated aluminum alloy
- ⑦ **Drive**
 - double-acting pneumatic cylinder
- ⑧ **Intake flange**
 - quick and cost-effective positioning of adapter plates: Accessory, Art. No. AP...G and AP...V

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



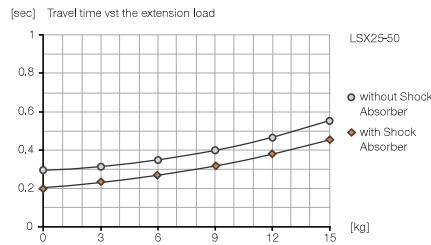
LINEAR RAIL SLIDES

LSX25-50

▶ PRODUCT SPECIFICATIONS

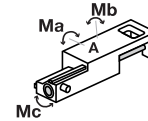


▶ Time diagram



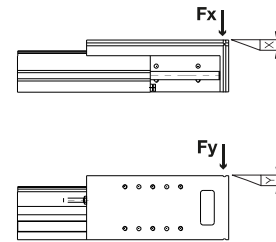
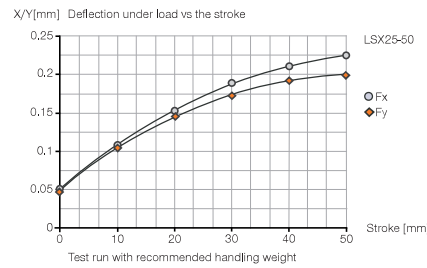
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M12X1S



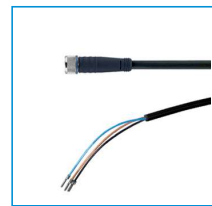
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



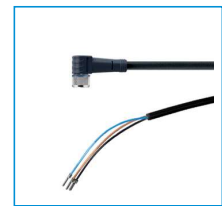
Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector customiz-
able Straight - Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV1-8X6



Adapter plate

APLSX25G



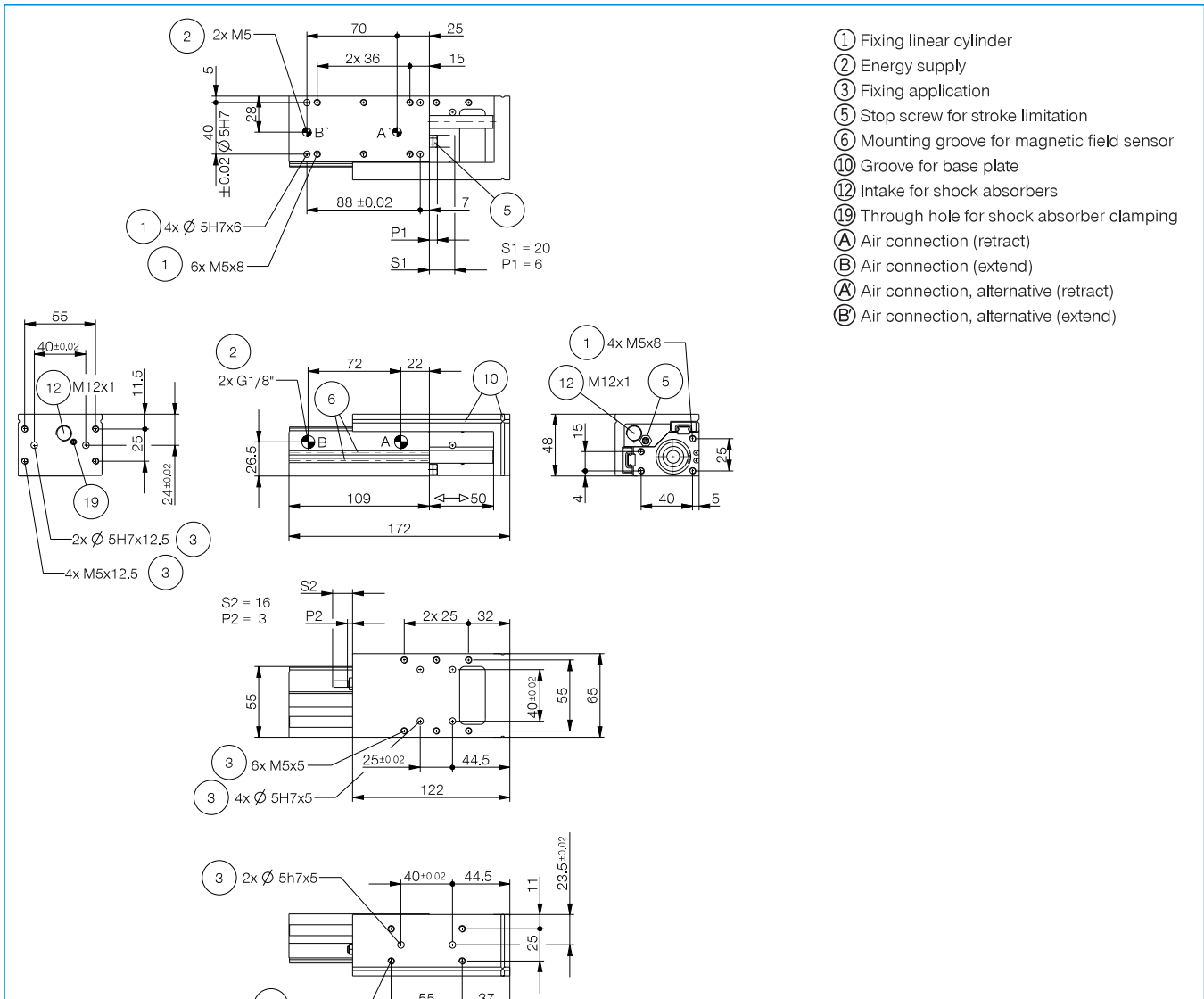
Adapter plate

APLSX25V

Order no.	LSX25-50
Stroke [mm]	50
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	45
Weight [kg]	1

*All data measured at 6 bar

► Technical Data*



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- ⑫ Intake for shock absorbers
- ⑰ Through hole for shock absorber clamping
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)
- Ⓐ' Air connection, alternative (retract)
- Ⓑ' Air connection, alternative (extend)

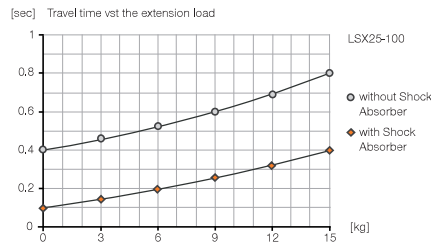
LINEAR RAIL SLIDES

LSX25-100

▶ PRODUCT SPECIFICATIONS

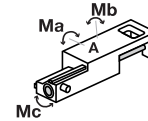


▶ Time diagram



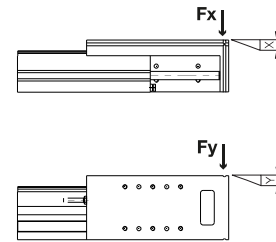
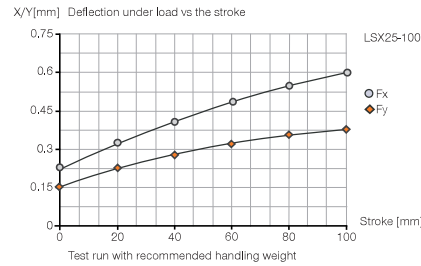
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M12X1S



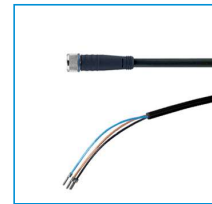
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



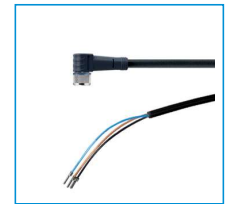
Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector customiz-
able Straight - Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV1-8X6



Adapter plate

APLSX25G

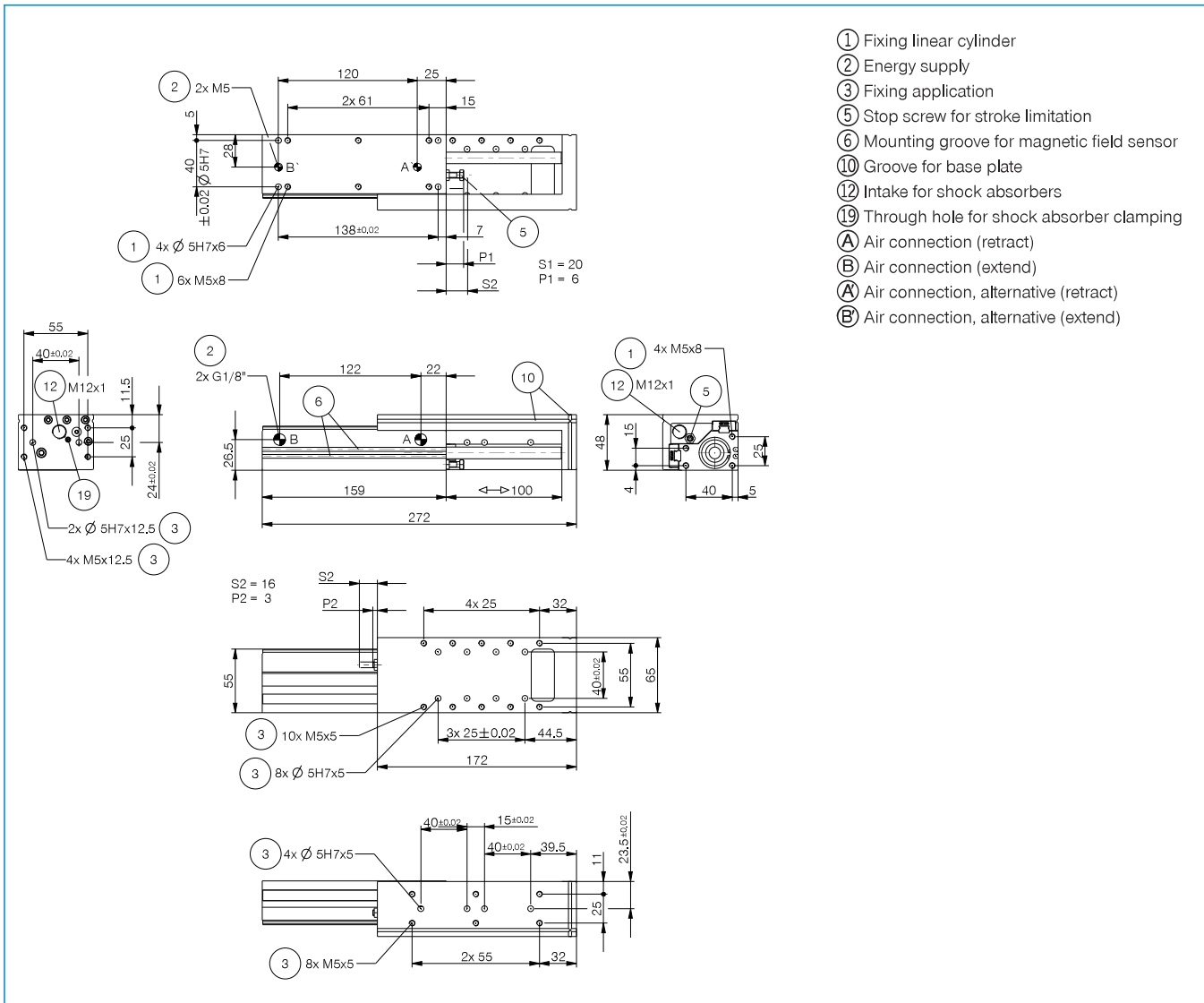


Adapter plate

APLSX25V

Order no.	▶ Technical Data*
Stroke [mm]	100
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	90
Weight [kg]	1.3

*All data measured at 6 bar



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- ⑫ Intake for shock absorbers
- ⑰ Through hole for shock absorber clamping
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)
- Ⓐ Air connection, alternative (retract)
- Ⓑ Air connection, alternative (extend)

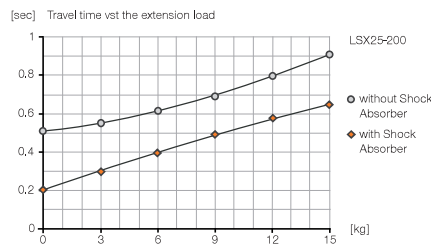
LINEAR RAIL SLIDES

LSX25-200

▶ PRODUCT SPECIFICATIONS

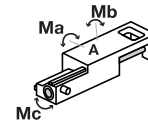


▶ Time diagram



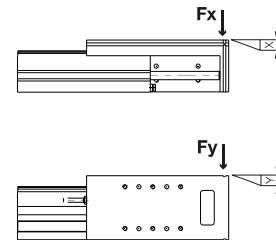
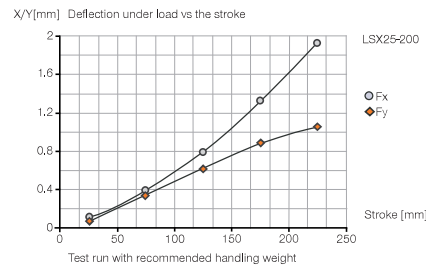
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M12X1S



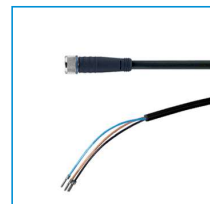
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



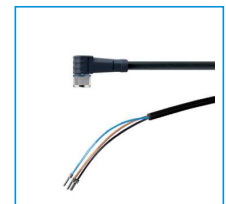
Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector customiz-
able Straight - Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV1-8X6



Adapter plate

APLSX25G

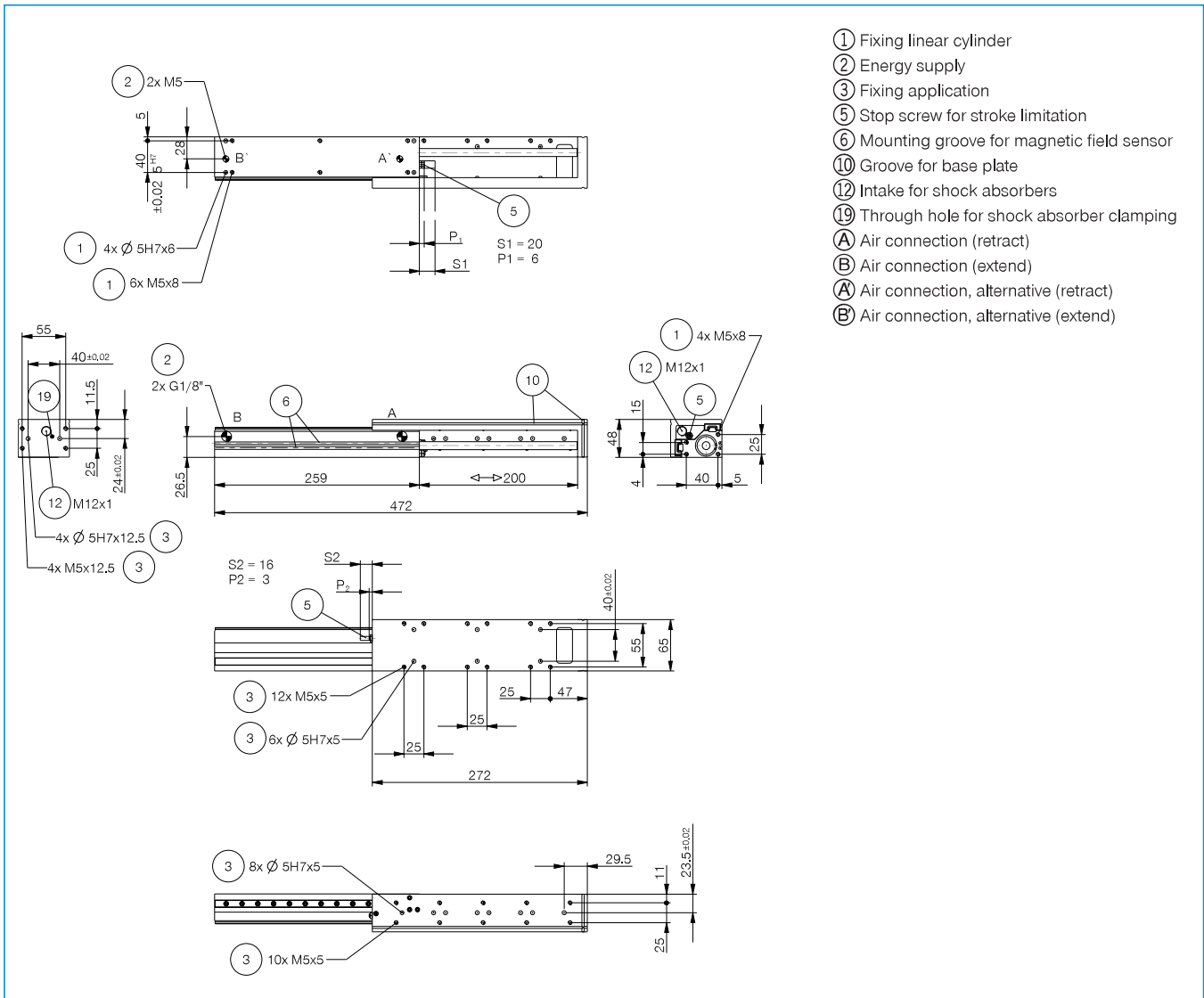


Adapter plate

APLSX25V

Order no.	▶ Technical Data*
Stroke [mm]	200
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	180
Weight [kg]	1.9

*All data measured at 6 bar



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- ⑫ Intake for shock absorbers
- ⑰ Through hole for shock absorber clamping
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)
- Ⓐ Air connection, alternative (retract)
- Ⓑ Air connection, alternative (extend)

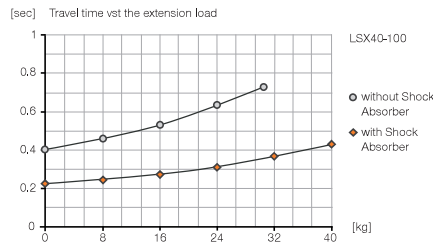
LINEAR RAIL SLIDES

LSX40-100

▶ PRODUCT SPECIFICATIONS

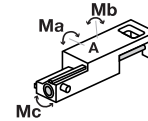


▶ Time diagram



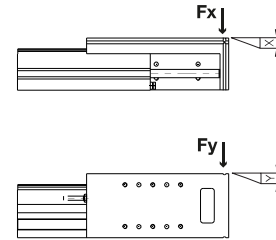
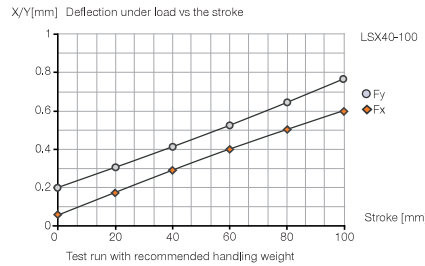
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	200
Mb [Nm]	200
Mc [Nm]	200

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



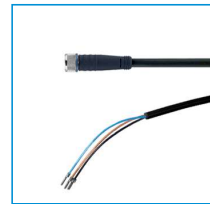
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



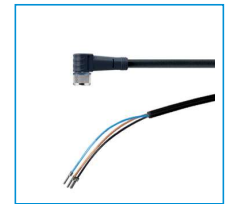
Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector customiz-
able Straight - Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV1-8X6



Adapter plate

APLSX40G

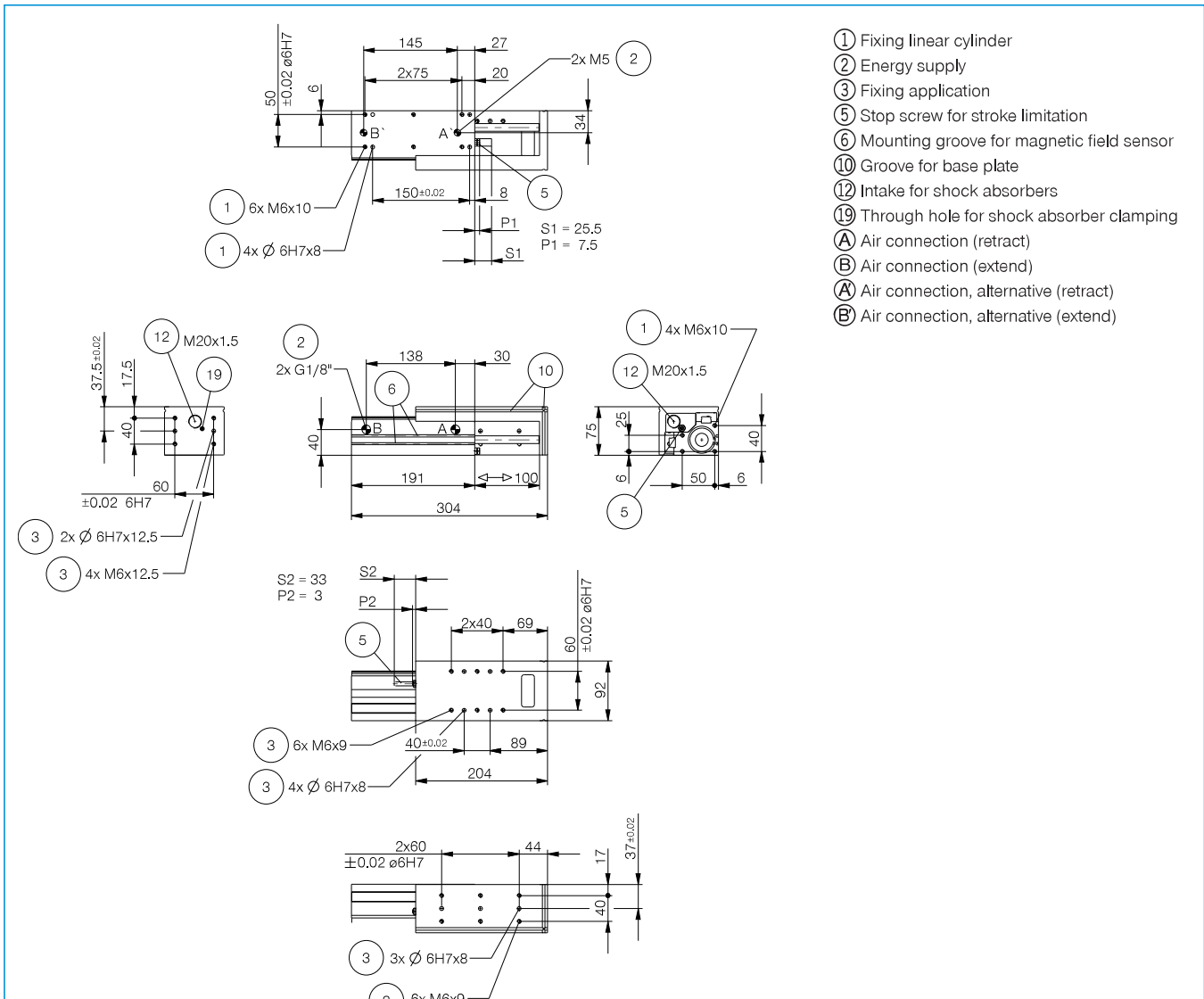


Adapter plate

APLSX40V

Order no.	▶ Technical Data*
Stroke [mm]	100
Pressure force max. [N]	750
Retraction force [N]	680
Recommended handling weight [kg]	40
Piston diameter [mm]	40
Guide rail size [mm]	30
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	235
Weight [kg]	3.2

*All data measured at 6 bar



- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- ⑫ Intake for shock absorbers
- ⑲ Through hole for shock absorber clamping
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)
- Ⓐ Air connection, alternative (retract)
- Ⓑ Air connection, alternative (extend)

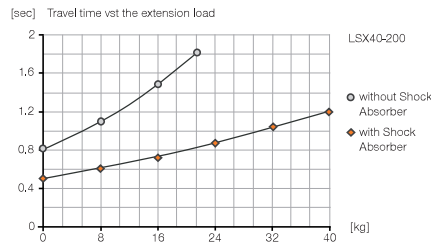
LINEAR RAIL SLIDES

LSX40-200

▶ PRODUCT SPECIFICATIONS

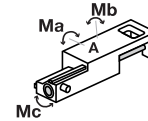


▶ Time diagram



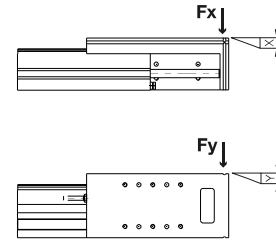
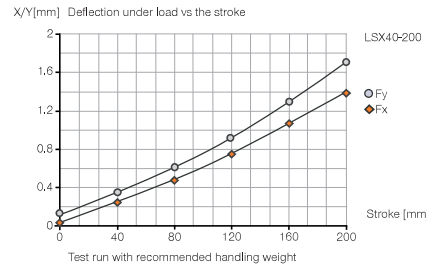
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	200
Mb [Nm]	200
Mc [Nm]	200

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



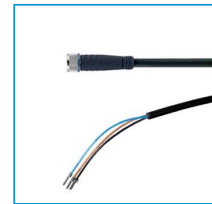
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector customiz-
able Straight - Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV1-8X6



Adapter plate

APLSX40G



Adapter plate

APLSX40V

LIFTING CYLINDERS

OVERVIEW OF SERIES



▶ PNEUMATIC

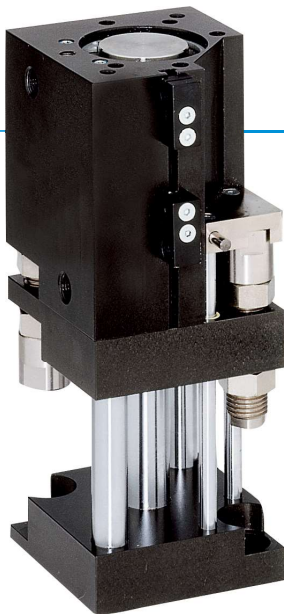


Series HZ

780

LIFTING CYLINDERS SERIES HZ

▶ PRODUCT ADVANTAGES



▶ Hoseless air passage

Eliminates undefined interference contours and wear-prone hoses and increases the safety of your application in the process

▶ Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ Very robust

Two ground and hard chrome-plated guide rods guarantee a secure process sequence with their rigidity and long service life

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

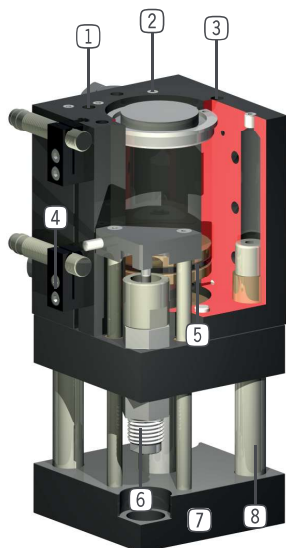
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Integrated air feed-through**
 - for hoseless air transfer
- ② **Energy supply**
 - possible from several sides
- ③ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ④ **Mounting block**
 - mounting for inductive proximity switch
- ⑤ **Drive**
 - double-acting pneumatic cylinder
- ⑥ **Patented, hydraulic shock absorber**
 - adjustable end position damping
- ⑦ **Intake flange**
 - for fixing to the customer specific application
- ⑧ **Two guide rods**
 - high forces and moments capacity

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



LIFTING CYLINDERS

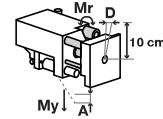
INSTALLATION SIZE HZ40

▶ PRODUCT SPECIFICATIONS

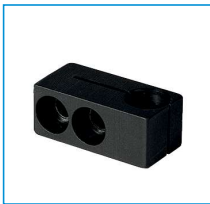


▶ Forces and moments

Max allowable static forces and moments.



▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Shock Absorbers

M14X1.5S



Stop sleeve

DST01491

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3



Flow Control Valves - with
Swivel joint

DRV1-8X6

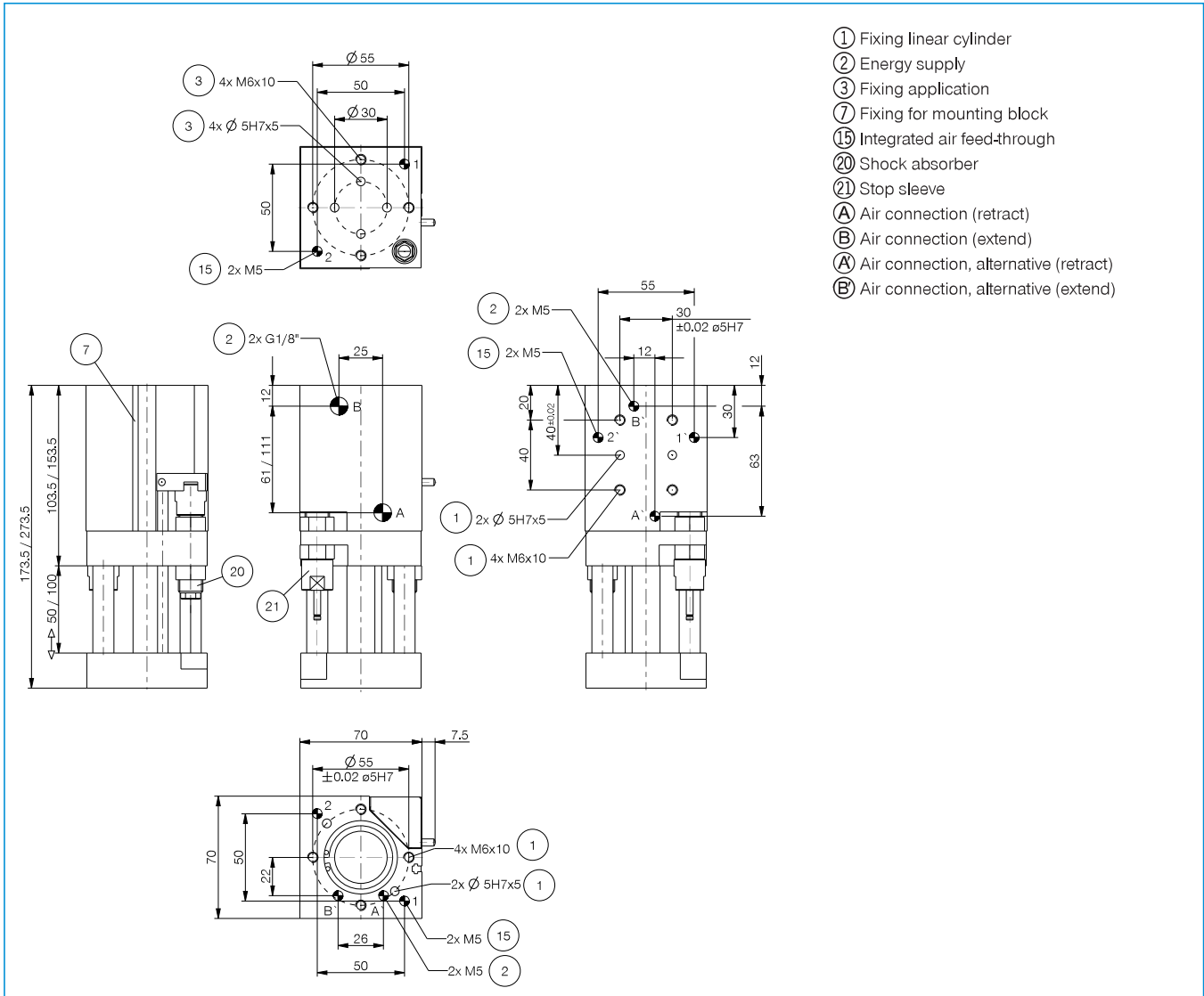


Pressure Safety Valve

DSV1-8

Order no.	▶ Technical Data*	
	HZ40-50D2	HZ40-100D2
Stroke [mm]	50	100
Pressure force max. [N]	720	720
Retraction force [N]	600	600
Air feed-through [Quantity]	2	2
Air volume per cycle [cm³]	116	232
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Weight [kg]	2	2.7
Deviation D for Mr 5 N [mm]		0.5
Deviation D for Mr 10 N [mm]	0.1	
Deviation D for Mr 15 N [mm]		0.15
Deviation D for Mr 70 N [mm]	0.5	
Deflection A for My 60 N [mm]	0.05	0.1
Deflection A for My 100 N [mm]	0.1	0.15

*All data measured at 6 bar



CUTTING TONGS

OVERVIEW OF SERIES



▶ PNEUMATIC



Series ZK1000

786



Series ZK

798

CUTTING TONGS

SERIES ZK1000

▶ PRODUCT ADVANTAGES



▶ **Extremely lightweight**

This light weight generally allows the use of a smaller moving axis, reducing the overall costs of the application in the process

▶ **Integrated magnetic field sensing**

One of the few cutting tongs on the market that can have its position queried and transferred to the control system with process reliability

▶ **Decide for yourself!**

Sprue or steel wire: The variety of cutting geometries and materials ensure you always find the correct cuttings

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

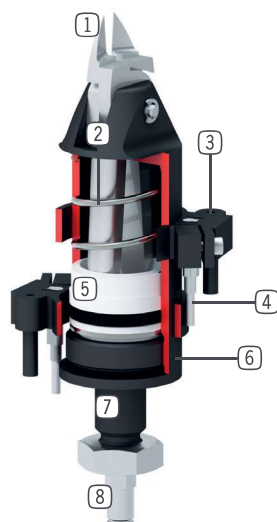
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Cutting insert**
 - flexible applicable due to specific cutting geometry
- ② **Return spring**
 - to open the cuttings
- ③ **Mounting clamp**
 - mounting and positioning of magnetic field sensors
- ④ **Magnetic field sensor**
 - for position sensing
- ⑤ **Drive**
 - single-acting pneumatic cylinder
- ⑥ **Housing**
 - Hard-coated aluminum alloy
- ⑦ **Mounting and positioning**
 - via fit, thread and lock nut
- ⑧ **Energy supply**

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



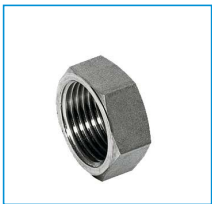
CUTTING TONGS

INSTALLATION SIZE ZK1030

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Locking nut

C093610009

▶ RECOMMENDED ACCESSORIES



Sensor holder

KHD30



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Straight Fittings - Barb
Style Connection

GVM3



Angled Fittings - Barb
Style Connection

WVM3



Cutting Insert 15° for
plastics

BK1030-01



Cutting Insert 40° For
Plastics

BK1030-02



Cutting Insert 0° For
Plastics

BK1030-03



Cutting Tong For Plastics

BK1030-04

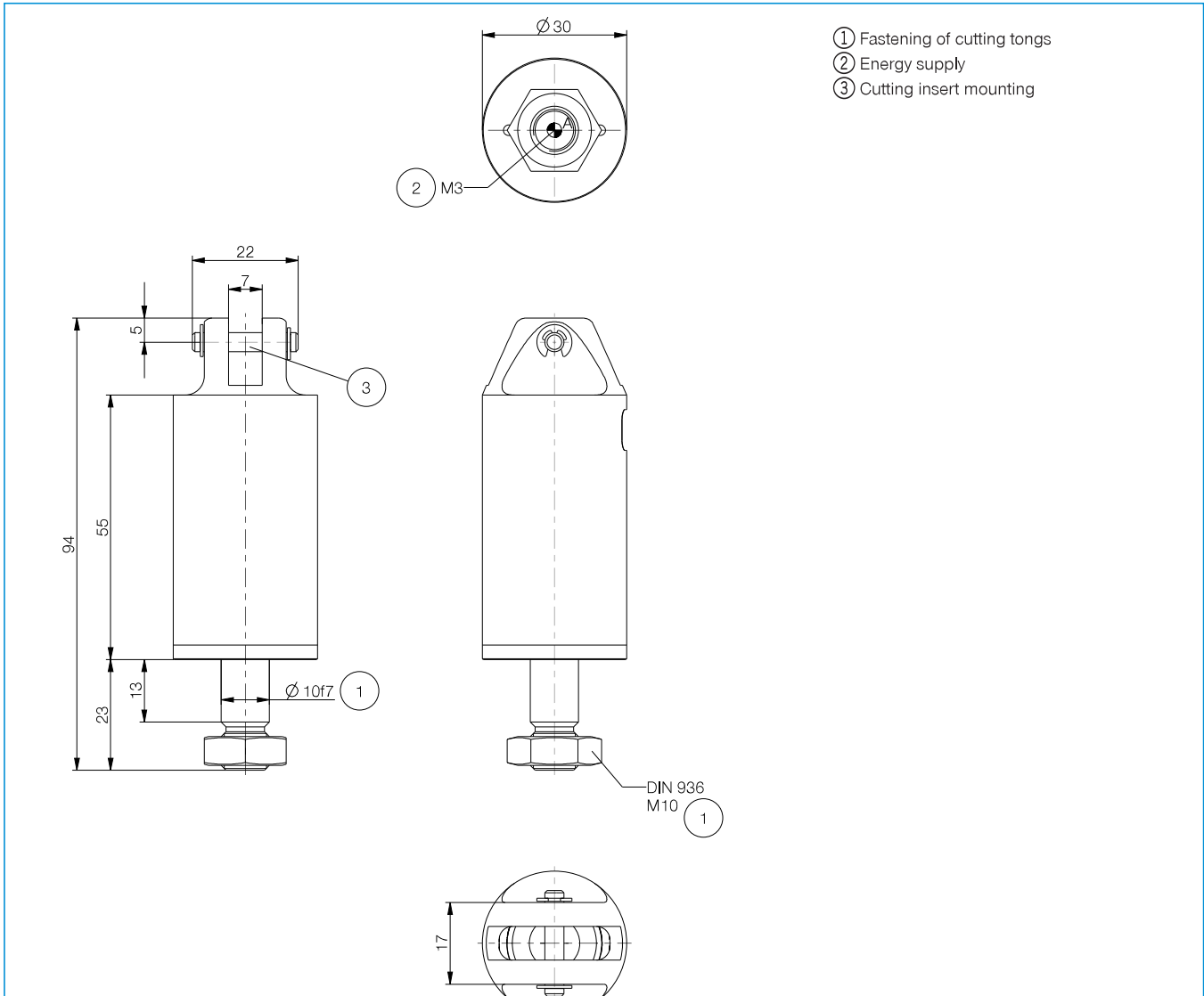


Cutting Insert 0° For Steel

BK1030-05

► Technical Data*	
Order no.	ZK1030
Stroke per jaw [°]	4,25
Gripping moment in closing [Nm]	14
Closing time [s]	0,01
Opening time [s]	0,1
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	5
Weight [kg]	0,08
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	2
possible cut-Ø max. hard-plastic [mm]	
possible cut-Ø max. copper [mm]	1
possible cut-Ø max. steel [mm]	0,5
possible cut-Ø max. piano wire [mm]	0,3

*All data measured at 6 bar



CUTTING TONGS

INSTALLATION SIZE ZK1036

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Locking nut

C093614159

▶ RECOMMENDED ACCESSORIES



Sensor holder

KHD36



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style

GVM5



Angled Fittings - Quick
Connect Style

WVM5



Cutting Insert 25° For
Plastics

BK1036-01



Cutting Insert 40° For
Plastics

BK1036-02



Cutting Insert 0° For
Plastics

BK1036-03



Cutting Tong For Plastics

BK1036-04

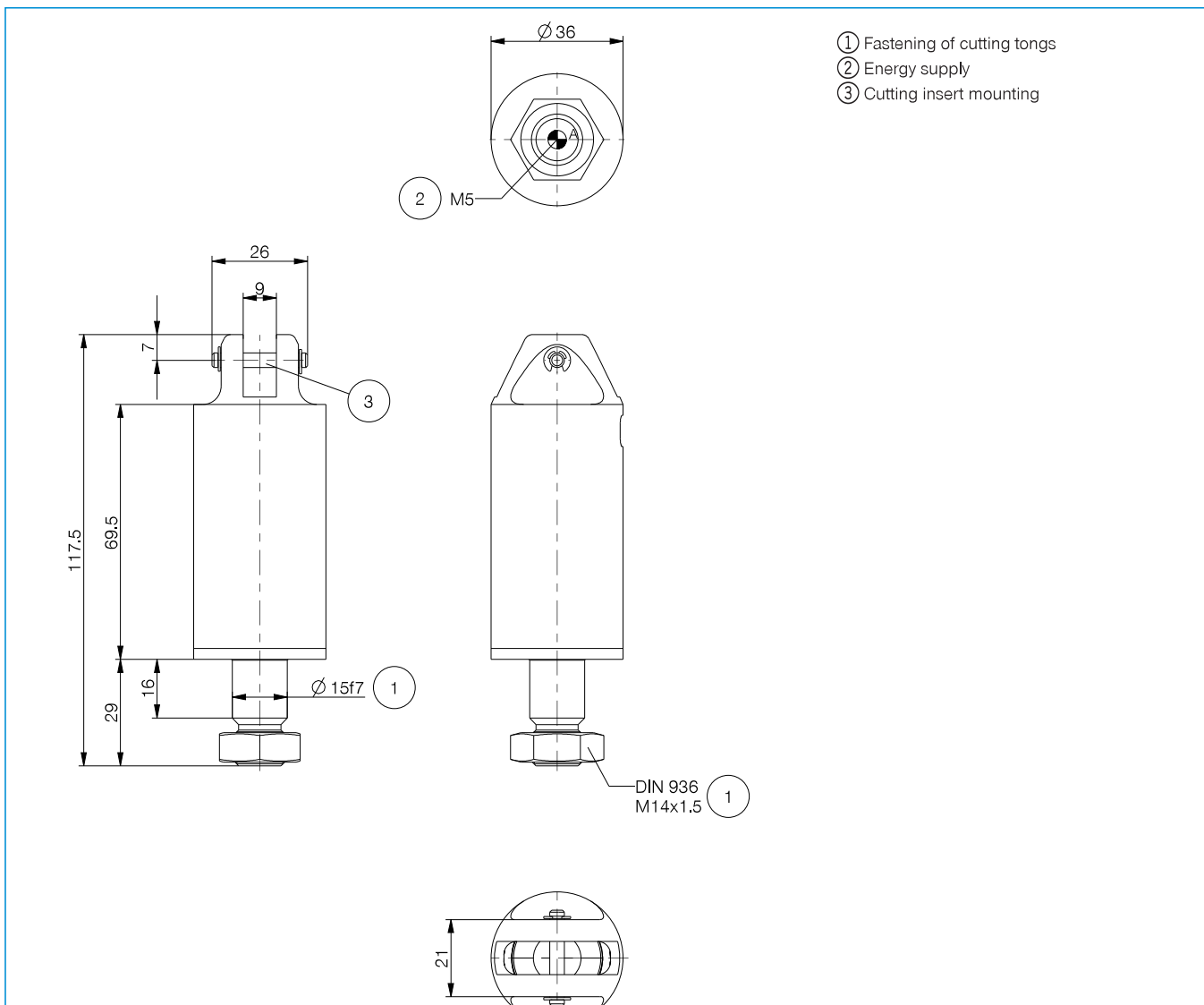


Cutting Insert 0° For Steel

BK1036-05

► Technical Data*	
Order no.	ZK1036
Stroke per jaw [°]	5
Gripping moment in closing [Nm]	40
Closing time [s]	0.04
Opening time [s]	0.15
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	9,2
Weight [kg]	0.13
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	4
possible cut-Ø max. hard-plastic [mm]	2.6
possible cut-Ø max. copper [mm]	1.6
possible cut-Ø max. steel [mm]	1
possible cut-Ø max. piano wire [mm]	0.5

*All data measured at 6 bar



CUTTING TONGS

INSTALLATION SIZE ZK1045

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Locking nut

C093620159

▶ RECOMMENDED ACCESSORIES



Sensor holder

KHD45



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style

GV1-8X6



Angled Fittings - Quick
Connect Style

WV1-8X6



Cutting Insert 15° for
plastics

BK1045-01



Cutting Insert 40° For
Plastics

BK1045-02



Cutting Insert 0° For
Plastics

BK1045-03



Cutting Tong For Plastics

BK1045-04

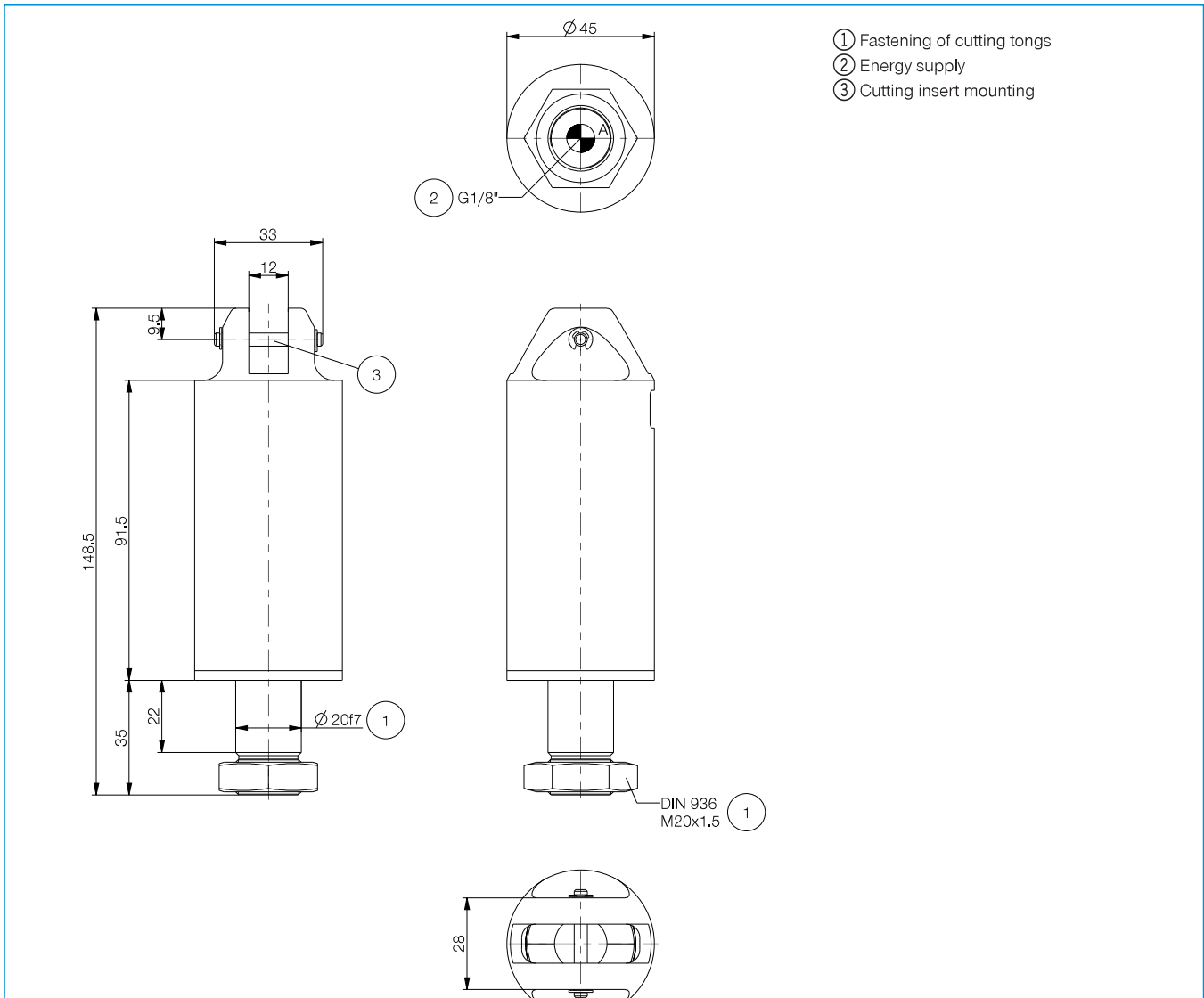


Cutting Insert 0° For Steel

BK1045-05

► Technical Data*	
Order no.	ZK1045
Stroke per jaw [°]	8,5
Gripping moment in closing [Nm]	98
Closing time [s]	0.06
Opening time [s]	0.2
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	32
Weight [kg]	0,24
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	7
possible cut-Ø max. hard-plastic [mm]	5
possible cut-Ø max. copper [mm]	2.6
possible cut-Ø max. steel [mm]	2
possible cut-Ø max. piano wire [mm]	1

*All data measured at 6 bar



CUTTING TONGS

INSTALLATION SIZE ZK1065

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Locking nut

C093620159

▶ RECOMMENDED ACCESSORIES



Sensor holder

KHD65



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style

GV1-8X6



Angled Fittings - Quick
Connect Style

WV1-8X6



Cutting Insert 15° for
plastics

BK1065-01



Cutting Insert 0° For
Plastics

BK1065-02



Cutting Insert 30° For
Plastics

BK1065-03



Cutting Tong For Plastics

BK1065-04

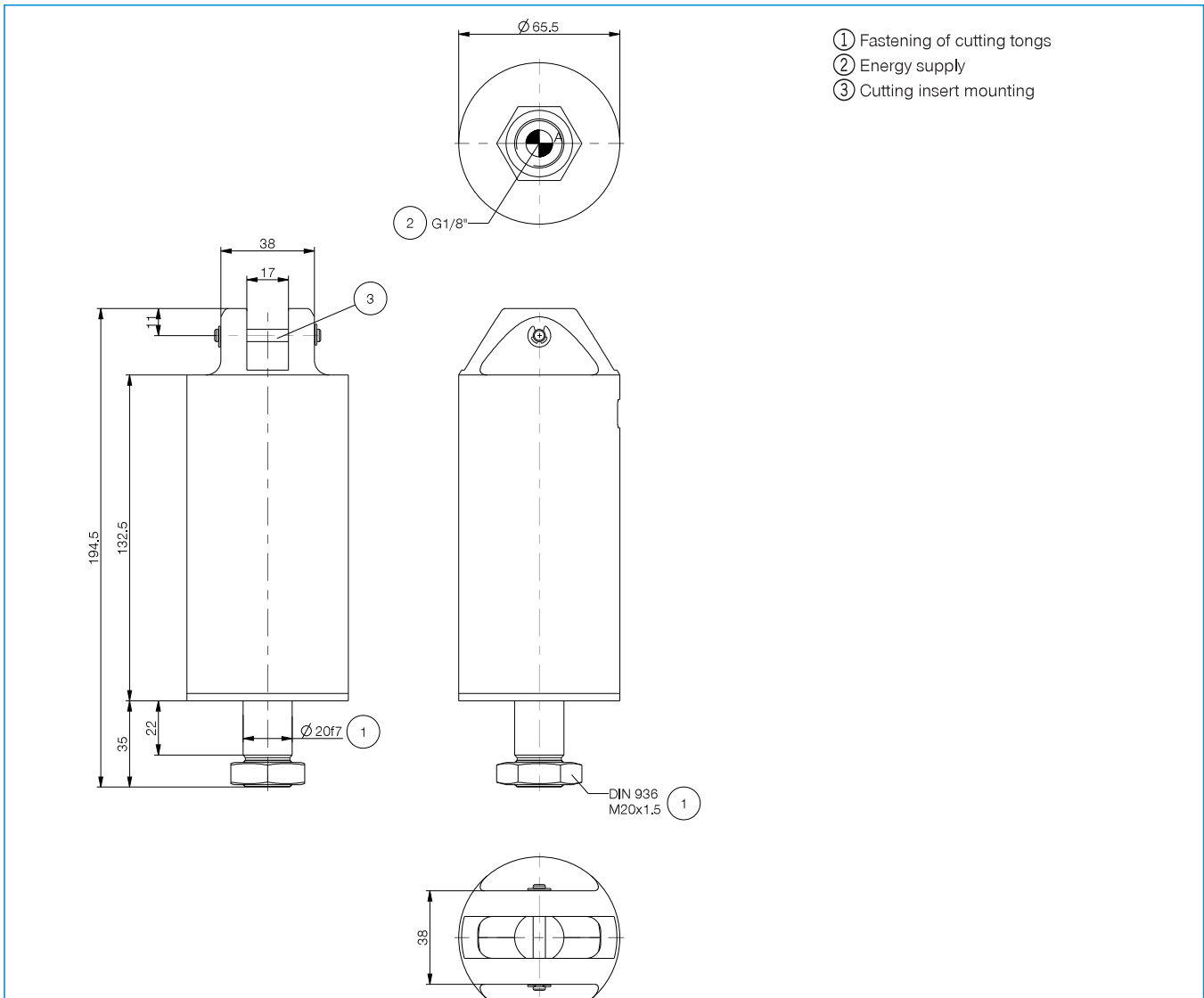


Cutting Insert 0° For Steel

BK1065-05

► Technical Data*	
Order no.	ZK1065
Stroke per jaw [°]	13
Gripping moment in closing [Nm]	400
Closing time [s]	0.1
Opening time [s]	0.4
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	130
Weight [kg]	0,67
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	11
possible cut-Ø max. hard-plastic [mm]	8
possible cut-Ø max. copper [mm]	6
possible cut-Ø max. steel [mm]	4
possible cut-Ø max. piano wire [mm]	

*All data measured at 6 bar



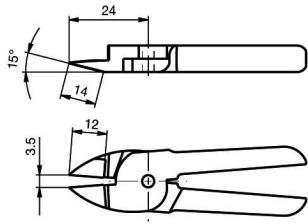
CUTTING TONGS

ZK1000 SERIES CUTTING INSERTS

CUTTING INSERTS FOR ZK1030

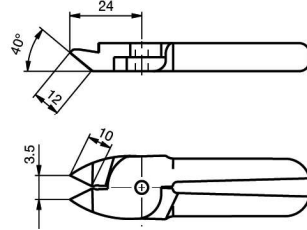
Cutting Insert 15° for plastics

BK1030-01



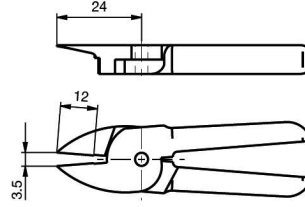
Cutting Insert 40° For Plastics

BK1030-02



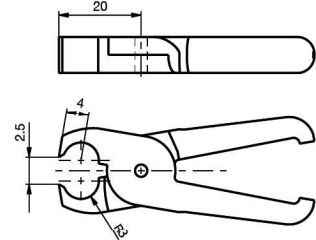
Cutting Insert 0° For Plastics

BK1030-03



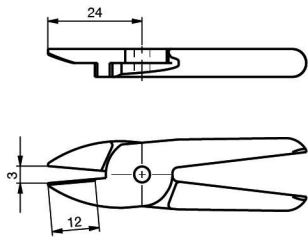
Cutting Tong For Plastics

BK1030-04



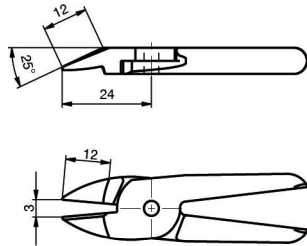
Cutting Insert 0° For Steel

BK1030-05



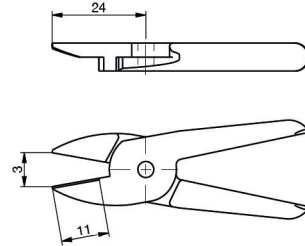
Cutting Insert 25° For Steel

BK1030-06



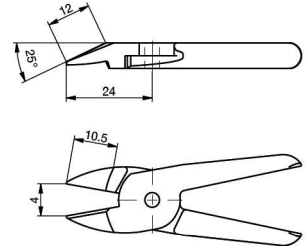
Carbide cutting insert 0° for steel

BK1030-07



Carbide Cutting Insert 25° For Steel

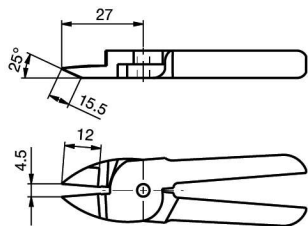
BK1030-08



CUTTING INSERTS FOR ZK1036

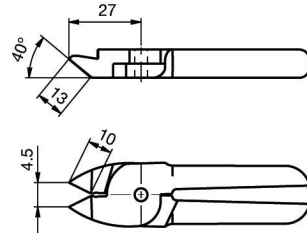
Cutting Insert 25° For Plastics

BK1036-01



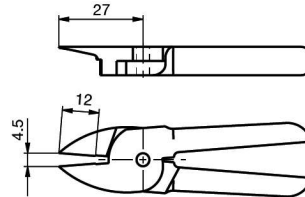
Cutting Insert 40° For Plastics

BK1036-02



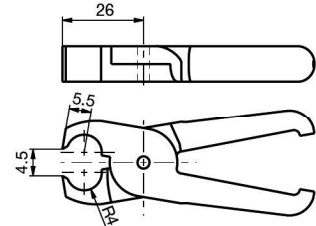
Cutting Insert 0° For Plastics

BK1036-03



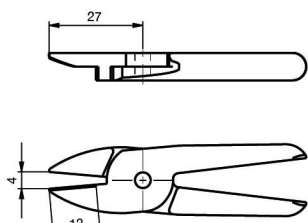
Cutting Tong For Plastics

BK1036-04



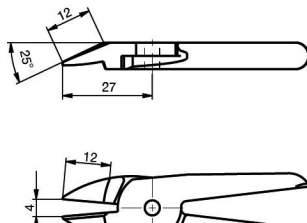
Cutting Insert 0° For Steel

BK1036-05



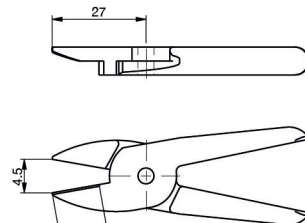
Cutting Insert 25° For Steel

BK1036-06



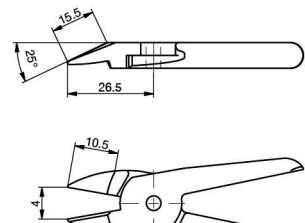
Carbide cutting insert 0° for steel

BK1036-07



Carbide Cutting Insert 25° For Steel

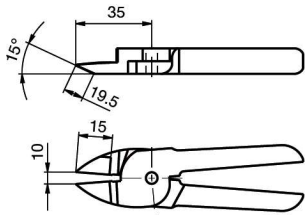
BK1036-08



▶ CUTTING INSERTS FOR ZK1045

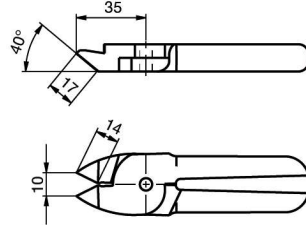
Cutting Insert 15° for plastics

BK1045-01



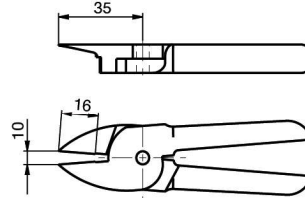
Cutting Insert 40° For Plastics

BK1045-02



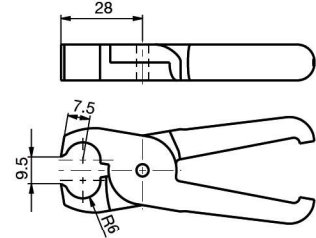
Cutting Insert 0° For Plastics

BK1045-03



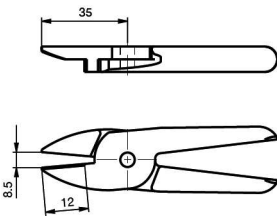
Cutting Tong For Plastics

BK1045-04



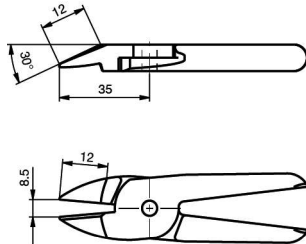
Cutting Insert 0° For Steel

BK1045-05



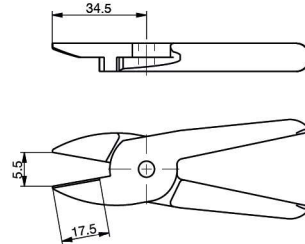
Cutting Insert 30° For Steel

BK1045-06



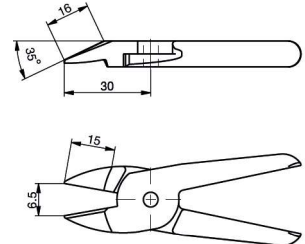
Carbide cutting insert 0° for steel

BK1045-07



Carbide Cutting Insert 35° For Steel

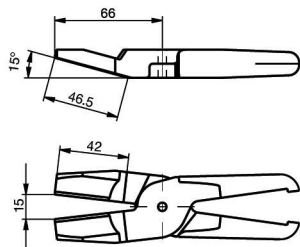
BK1045-08



▶ CUTTING INSERTS FOR ZK1065

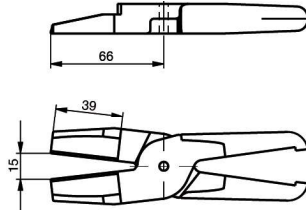
Cutting Insert 15° for plastics

BK1065-01



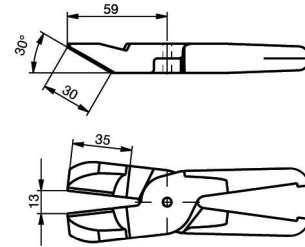
Cutting Insert 0° For Plastics

BK1065-02



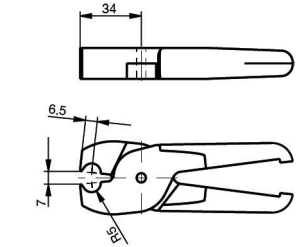
Cutting Insert 30° For Plastics

BK1065-03



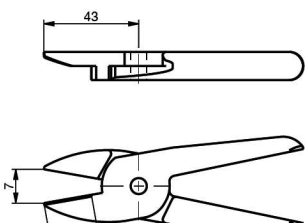
Cutting Tong For Plastics

BK1065-04



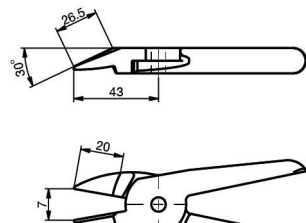
Cutting Insert 0° For Steel

BK1065-05



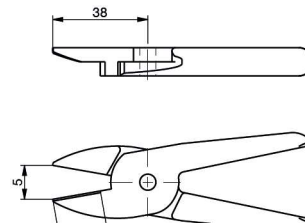
Cutting Insert 30° For Steel

BK1065-06



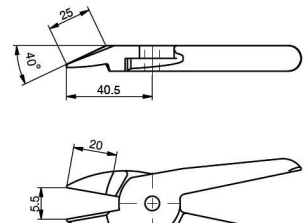
Carbide cutting insert 0° for steel

BK1065-07



Carbide Cutting Insert 40° For Steel

BK1065-08



CUTTING TONGS SERIES ZK

▶ PRODUCT ADVANTAGES



▶ **Flat structure**

Reduces the interference contours and enables simple integration into your machine design

▶ **Decide for yourself!**

The gripper jaw holder provides the option to adapt standard cutting, gripper jaws or your own design

▶ **Failure-free continuous operation**

Our uncompromising “Made in Germany” quality guarantees up to 5 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

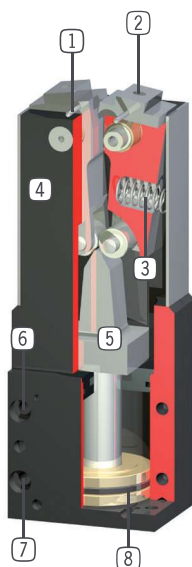
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Switch cam**
 - for position sensing
- ② **Mounting**
 - for individual jaws, knives, chucks and similar
- ③ **Integrated spring**
 - supports jaw return (ZK33)
- ④ **Robust, lightweight housing**
 - Hard-coated aluminum alloy
- ⑤ **Force transfer**
 - via wedge and rollers
- ⑥ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑦ **Energy supply**
 - possible from several sides
- ⑧ **Drive**
 - double-acting pneumatic cylinder

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► Technical Information

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Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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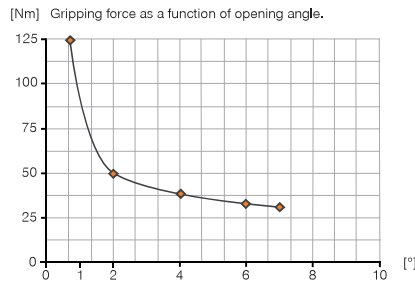
CUTTING TONGS

INSTALLATION SIZE ZK22

▶ PRODUCT SPECIFICATIONS



▶ Gripping moment diagram



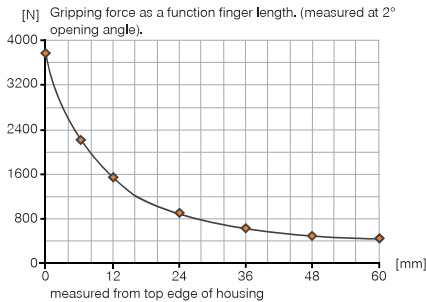
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
My [Nm]	30
Fa [N]	600

▶ Gripping force diagram



▶ RECOMMENDED ACCESSORIES



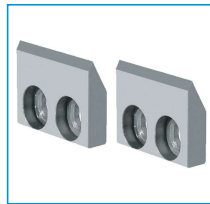
Universal Jaw Steel

UB22



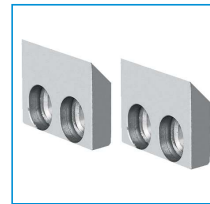
Cutter mounting set

BK22



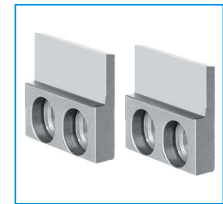
Cutter set with double ground cutting edge

BK22-1



Cutter set with single ground cutting edge

BK22-2



Cutter set with shearing blades

BK22-3



Mounting block

KB3



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Straight Fittings - Quick Connect Style

GVM5

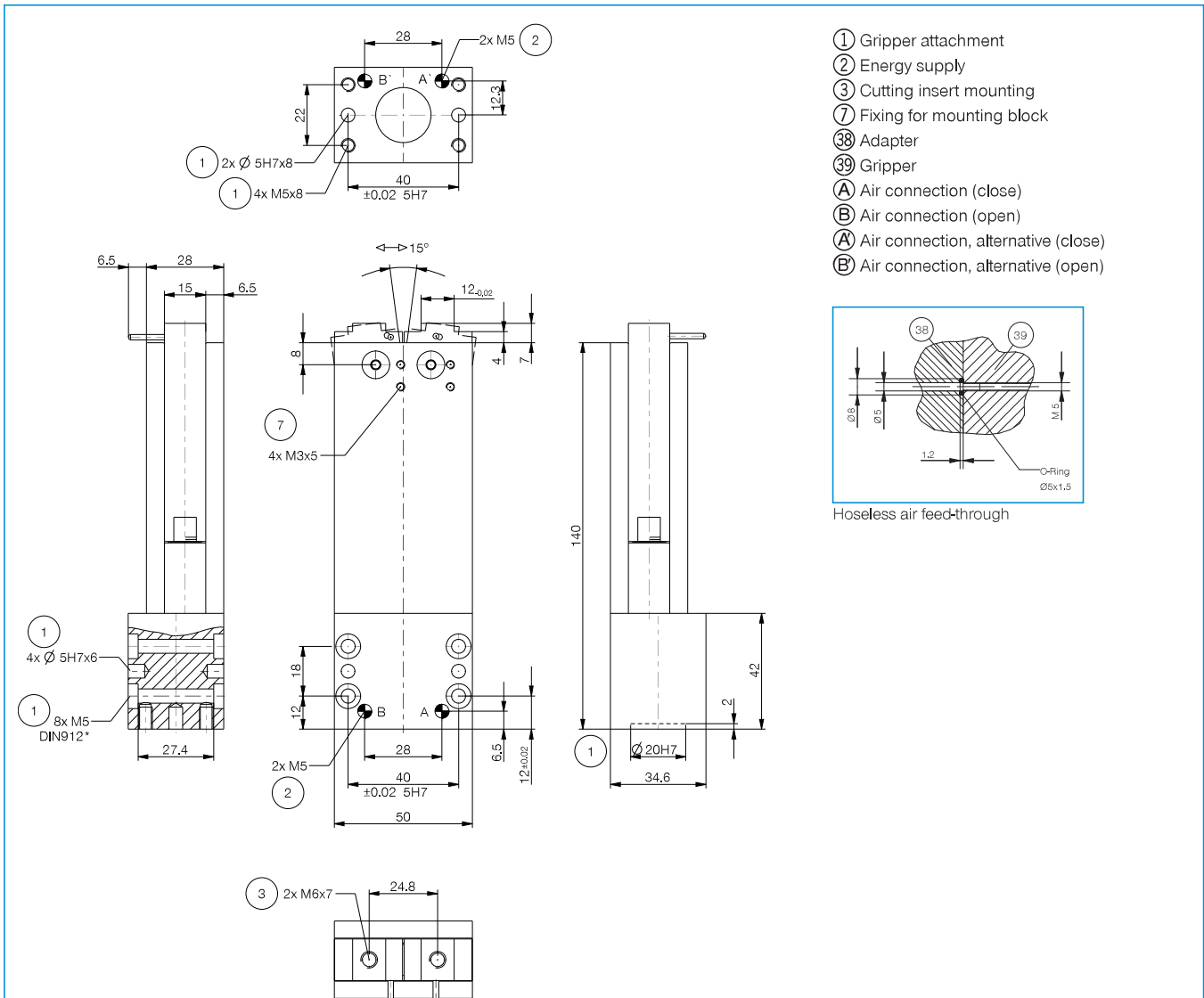


Angled Fittings - Quick Connect Style

VVM5

Order no.	ZK22
Stroke per jaw [°]	7.5
Gripping moment in closing [Nm]	54
Gripping force in closing [N]	3600
Closing time [s]	0.15
Opening time [s]	0.15
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	10
Weight [kg]	0.79

*All data measured at 6 bar



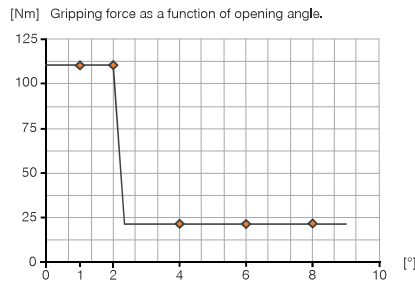
CUTTING TONGS

INSTALLATION SIZE ZK33

▶ PRODUCT SPECIFICATIONS



▶ Gripping moment diagram



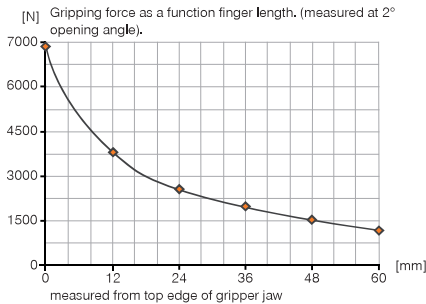
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	26
My [Nm]	40
Fa [N]	720

▶ Gripping force diagram



▶ RECOMMENDED ACCESSORIES



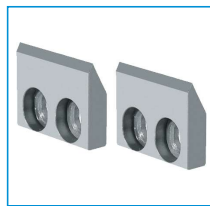
Universal Jaw Steel

UB22



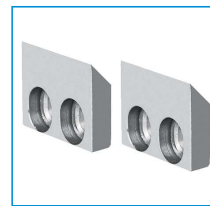
Cutter mounting set

BK22



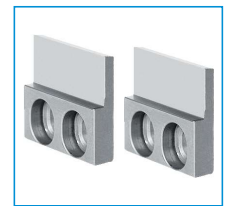
Cutter set with double ground cutting edge

BK22-1



Cutter set with single ground cutting edge

BK22-2



Cutter set with shearing blades

BK22-3



Mounting block

KB3



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Straight Fittings - Quick Connect Style

GVM5

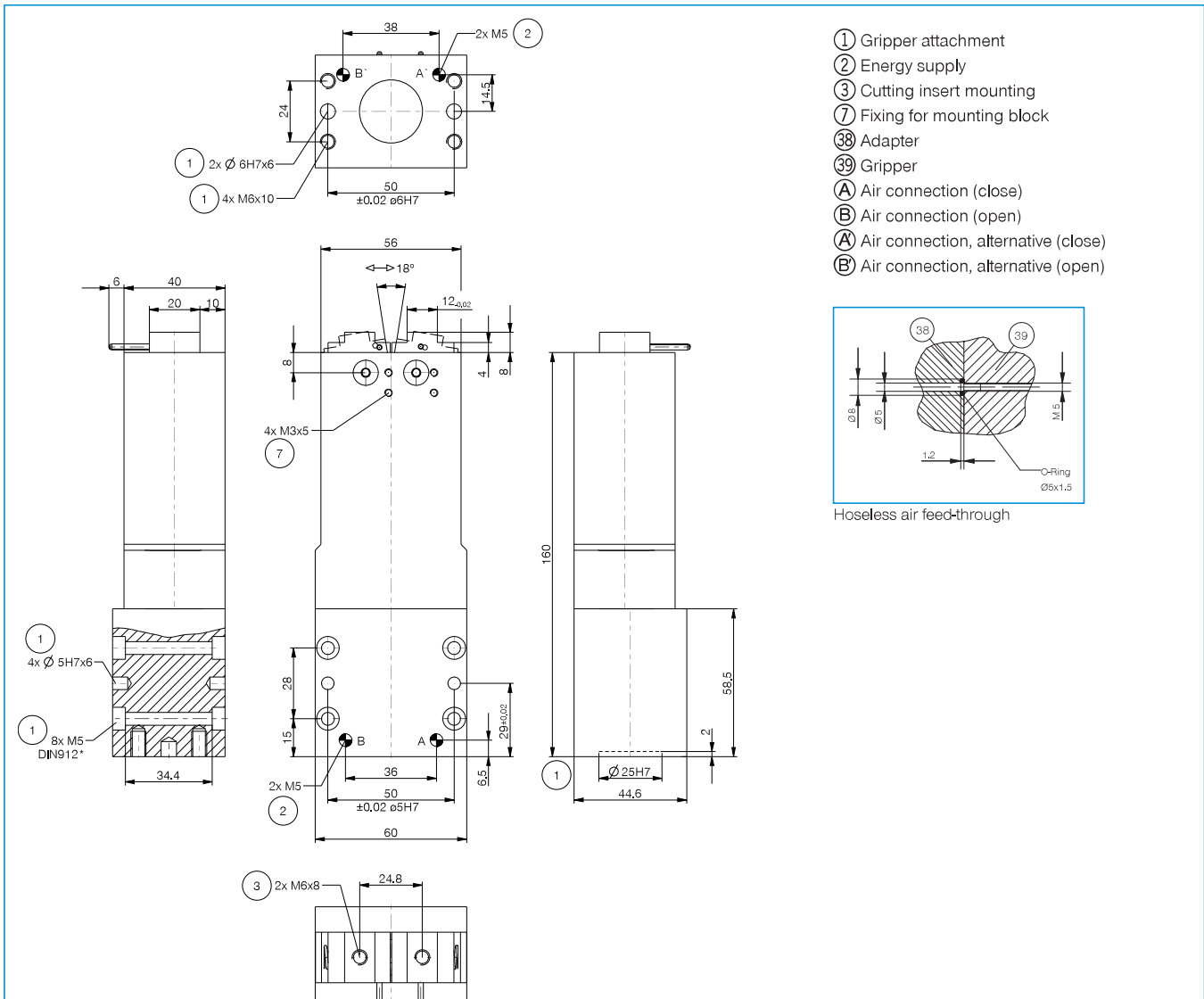


Angled Fittings - Quick Connect Style

VVM5

Order no.	ZK33
Stroke per jaw [°]	9
Gripping moment in closing [Nm]	110
Gripping force in closing [N]	6800
Closing time [s]	0.2
Opening time [s]	0.2
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	73
Weight [kg]	1.3

*All data measured at 6 bar



SEPARATORS

OVERVIEW OF SERIES



▶ PNEUMATIC



Series VEG

806



Series VE

818

SEPARATORS

SERIES VEG

▶ PRODUCT ADVANTAGES



▶ **Hardened stainless steel guide**

This guide is robust, reliable and durable: Exactly what you need for your application!

▶ **Decide for yourself!**

Sensing via magnetic field sensors or inductive proximity switches: Unlike the benchmark, you are free to choose!

▶ **Failure-free continuous operation**

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

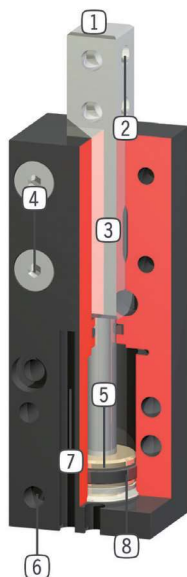
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Tapped rod**
 - hardened steel
- ② **Mounting**
 - individual separator finger mounting
- ③ **Square guide**
 - rugged, high forces and moments capacity
- ④ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑤ **Drive**
 - double-acting pneumatic cylinder
- ⑥ **Energy supply**
- ⑦ **Sensing**
 - groove for positioning of the magnetic field sensor
- ⑧ **Permanent magnet**
 - installed in piston area

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



SEPARATORS

INSTALLATION SIZE VEG10

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	3
My [Nm]	3
Mx [Nm]	3
Fa [N]	75

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



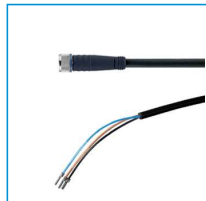
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5

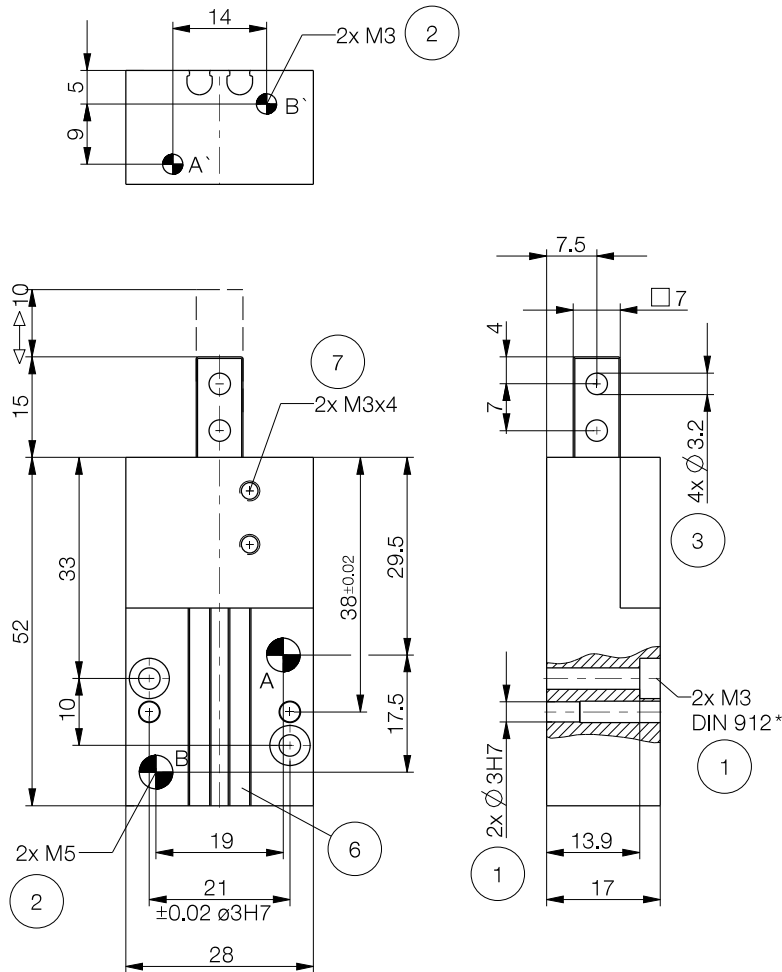


Angled Fittings - Quick
Connect Style

WVM5

Order no.	VEG10-B
Stroke per tapped rod [mm]	10
Force in retract [N]	30
Force in extend [N]	40
Cycle count [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1.5
Weight [kg]	0.075

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ④ Integrated slot for magnetic field sensor
- ⑤ Fixing for mounting block
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)

SEPARATORS

INSTALLATION SIZE VEG14

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



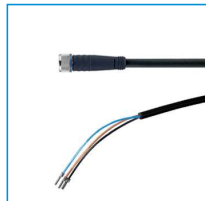
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5



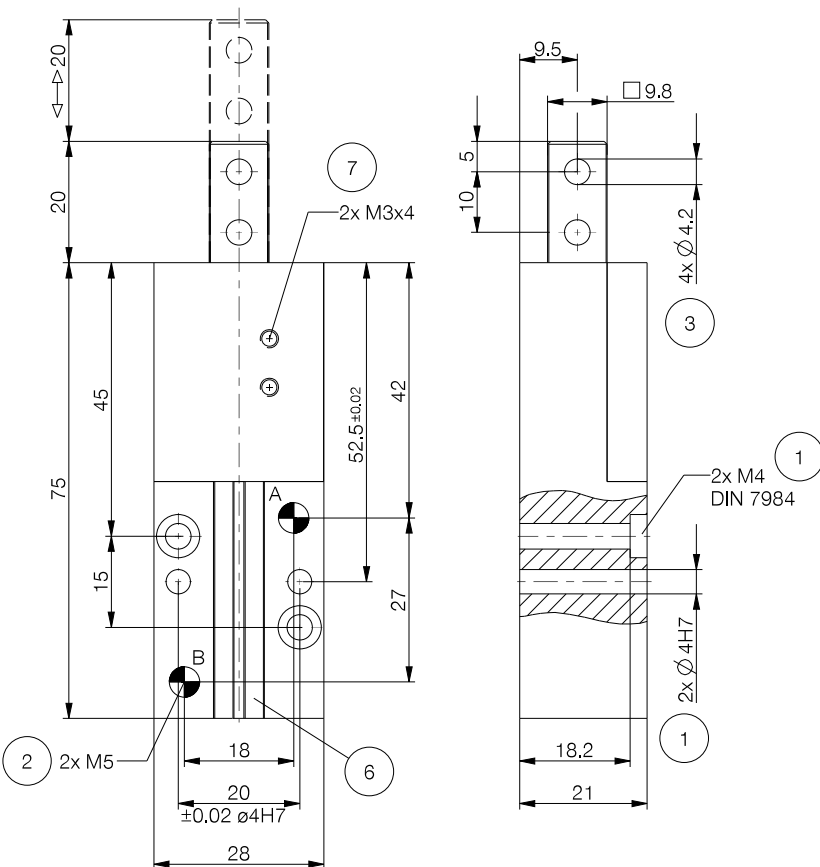
Angled Fittings - Quick
Connect Style

WVM5

Order no.	VEG14-B
Stroke per tapped rod [mm]	20
Force in retract [N]	65
Force in extend [N]	80
Cycle count [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	6
Weight [kg]	0.142

*All data measured at 6 bar

► Technical Data*



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)

SEPARATORS

INSTALLATION SIZE VEG15

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



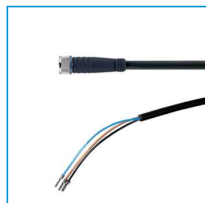
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5

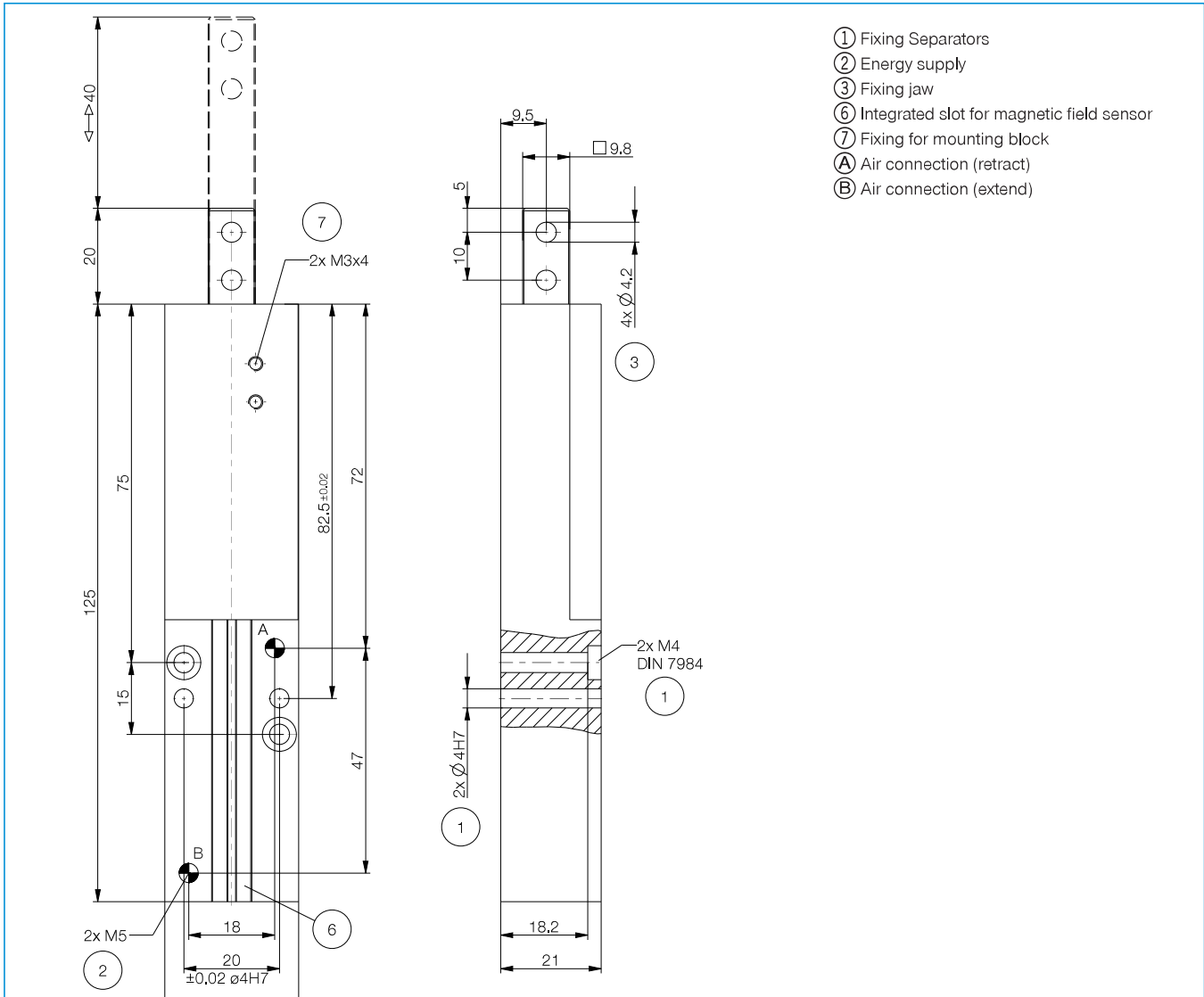


Angled Fittings - Quick
Connect Style

WVM5

Order no.	VEG15-B
Stroke per tapped rod [mm]	40
Force in retract [N]	65
Force in extend [N]	80
Cycle count [s]	0.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	11
Weight [kg]	0.2

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)

SEPARATORS

INSTALLATION SIZE VEG22

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



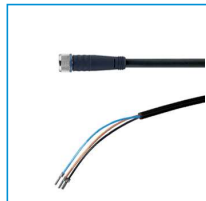
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5



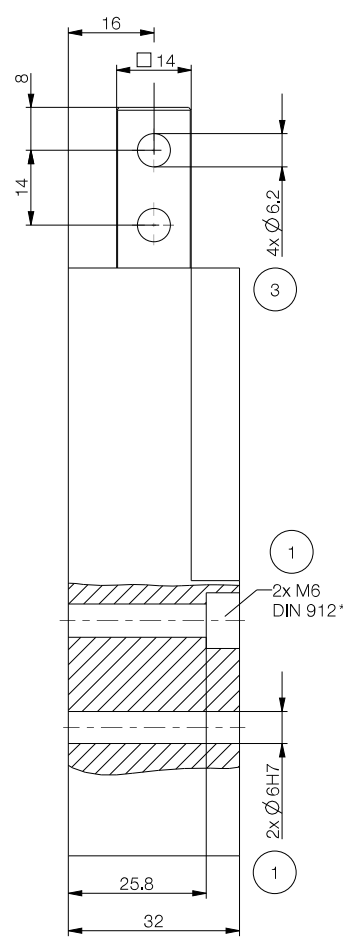
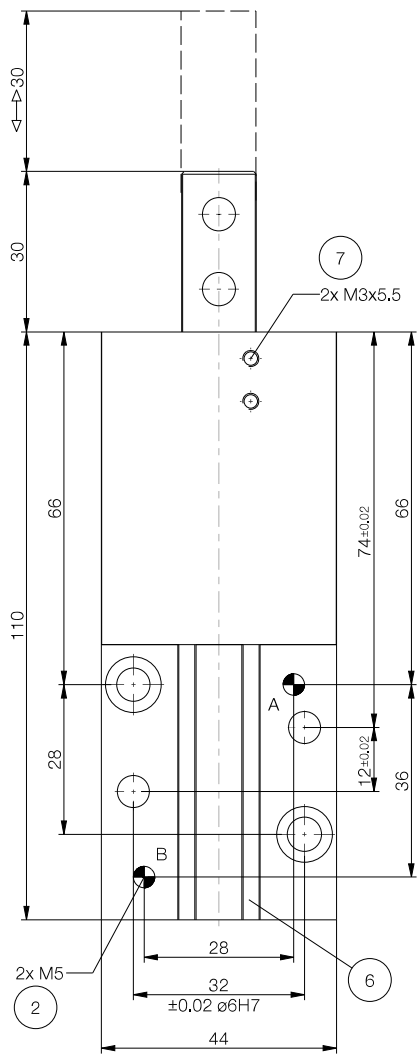
Angled Fittings - Quick
Connect Style

WVM5

Order no.	VEG22-B
Stroke per tapped rod [mm]	30
Force in retract [N]	170
Force in extend [N]	220
Cycle count [s]	0.08
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	20
Weight [kg]	0.5

*All data measured at 6 bar

► Technical Data*



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)

SEPARATORS

INSTALLATION SIZE VEG23

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



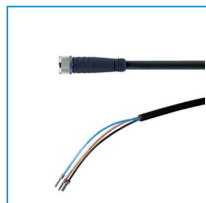
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



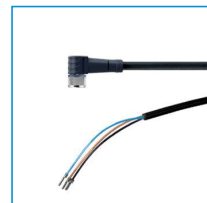
Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5

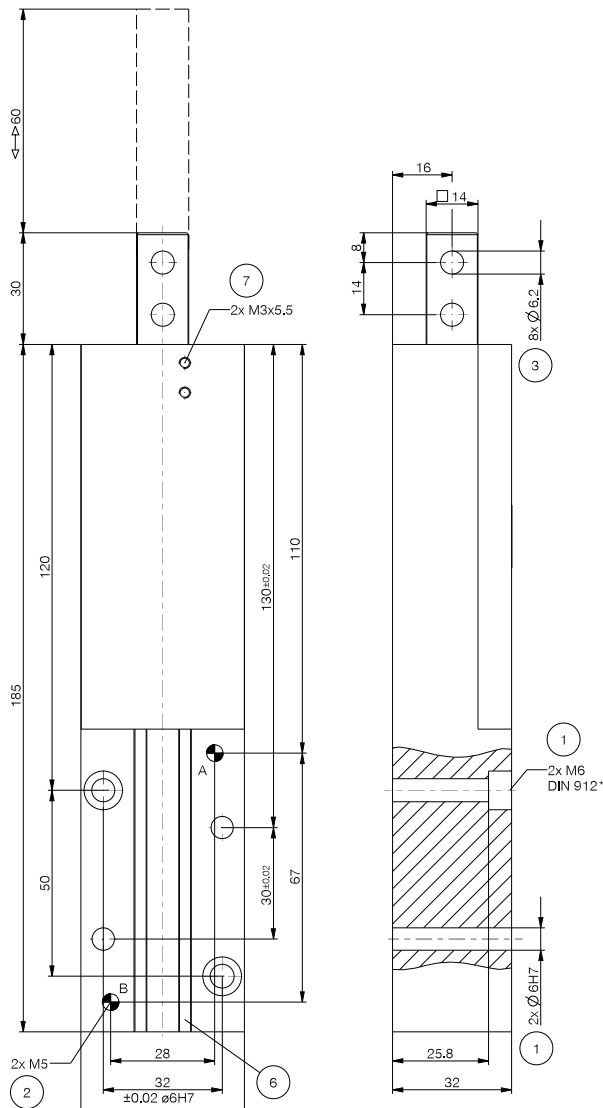


Angled Fittings - Quick
Connect Style

WVM5

Order no.	Technical Data*
Stroke per tapped rod [mm]	60
Force in retract [N]	170
Force in extend [N]	220
Cycle count [s]	0.12
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	42
Weight [kg]	0.75

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)

SEPARATORS

SERIES VE

▶ PRODUCT ADVANTAGES



▶ **Mechanical forced control**

Guarantees process reliability for your application since only one workpiece can be separated and guided through at a time

▶ **Decide for yourself!**

Sensing via magnetic field sensors or inductive proximity switches: Unlike the benchmark, you are free to choose!

▶ **Failure-free continuous operation**

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

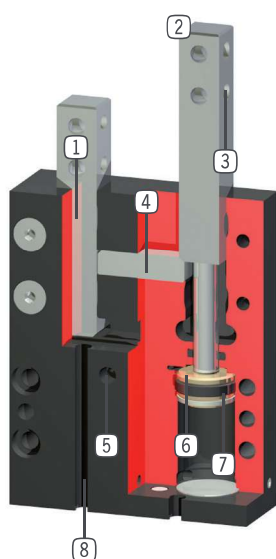
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Square guide**
 - rugged, high forces and moments capacity
- ② **Tapped rod**
 - hardened steel
- ③ **Mounting**
 - individual separator finger mounting
- ④ **Locking**
 - integrated, mechanical locking
- ⑤ **Energy supply**
 - possible from several sides
- ⑥ **Drive**
 - two double-acting pneumatic cylinders
- ⑦ **Permanent magnet**
 - installed in piston area
- ⑧ **Sensing**
 - groove for positioning of the magnetic field sensor

► FURTHER INFORMATION IS AVAILABLE ONLINE



► **Technical Information**

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



SEPARATORS

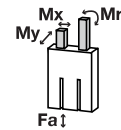
INSTALLATION SIZE VE10

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	3
My [Nm]	3
Mx [Nm]	3
Fa [N]	75

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



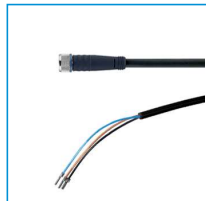
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5

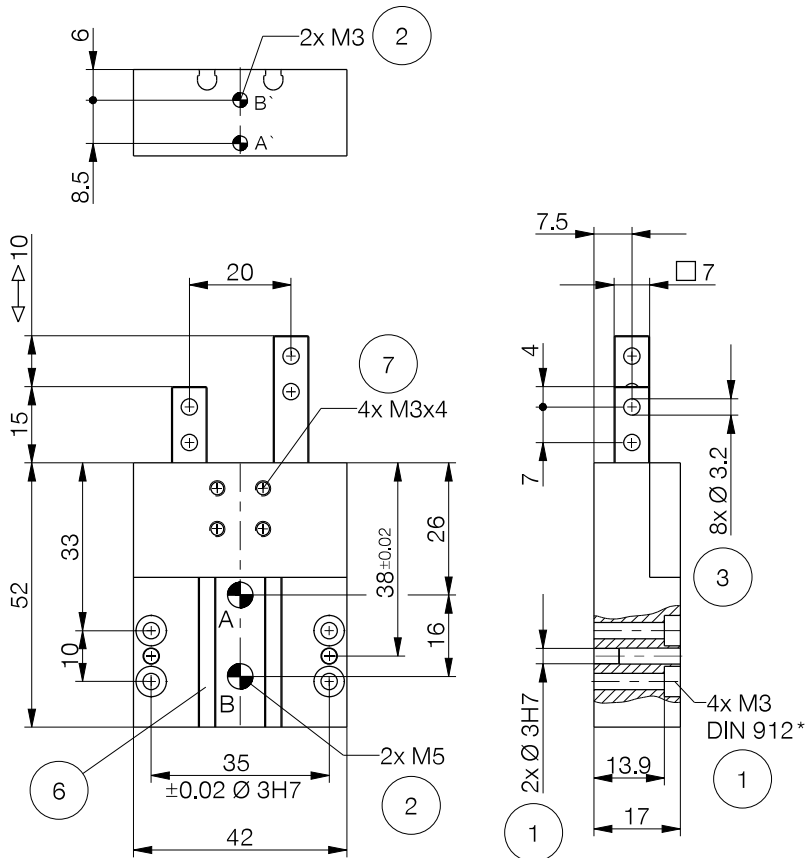


Angled Fittings - Quick
Connect Style

WVM5

Order no.	Technical Data*
Stroke per tapped rod [mm]	10
Force in retract [N]	30
Force in extend [N]	40
Self locking mechanism	mechanical
Cycle count [s]	0,04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	3
Weight [kg]	0.12

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- A Air connection (left retract/right extend)
- B Air connection (left extend/right retract)

SEPARATORS

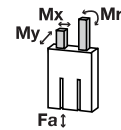
INSTALLATION SIZE VE14

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



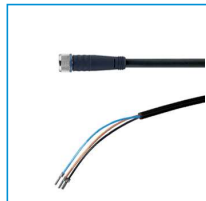
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5

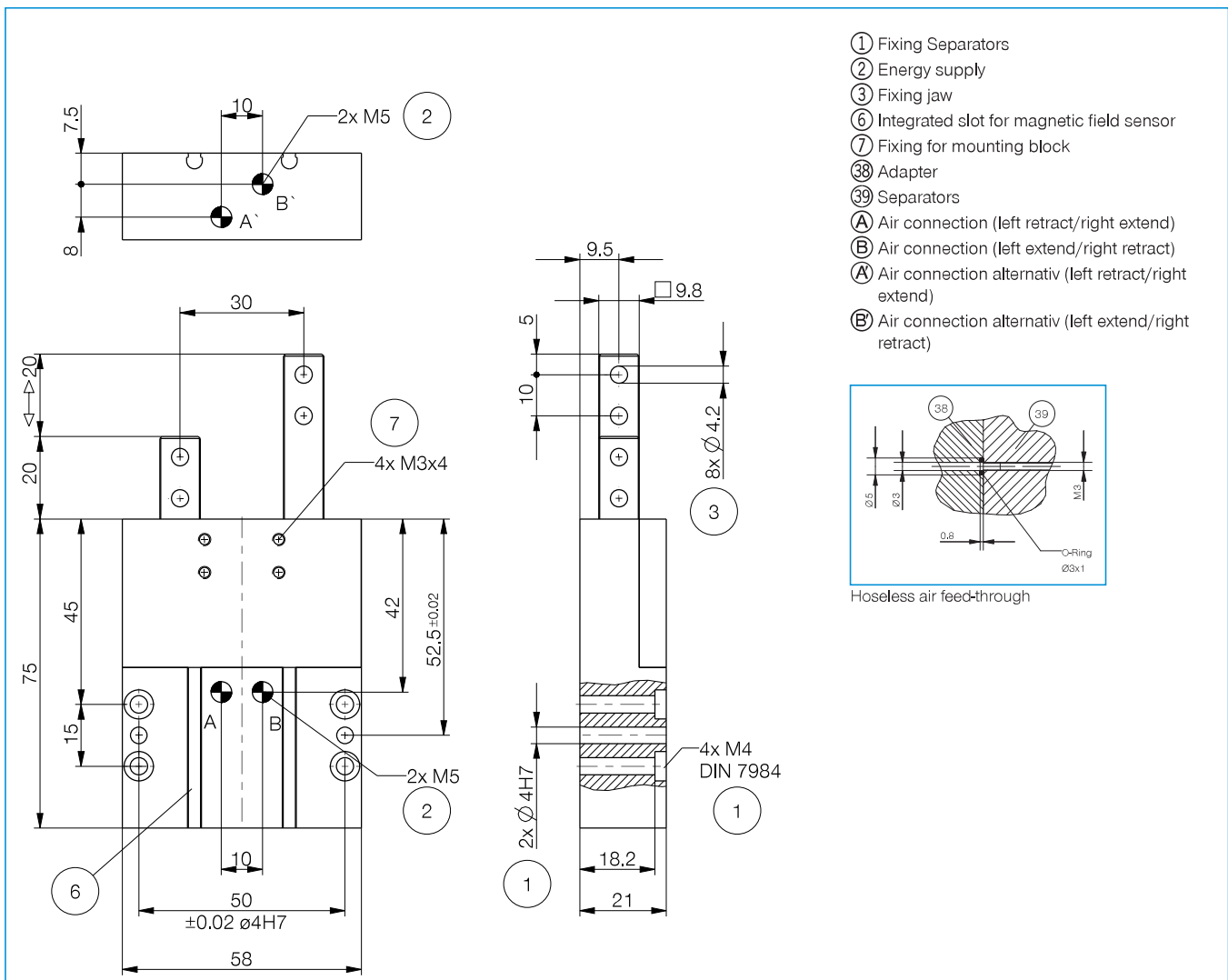


Angled Fittings - Quick
Connect Style

WVM5

Order no.	VE14-B
Stroke per tapped rod [mm]	20
Force in retract [N]	65
Force in extend [N]	80
Self locking mechanism	mechanical
Cycle count [s]	0.05
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	11
Weight [kg]	0.3

*All data measured at 6 bar



SEPARATORS

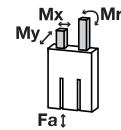
INSTALLATION SIZE VE15

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



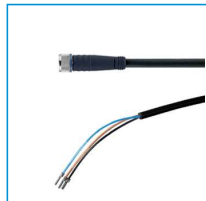
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5

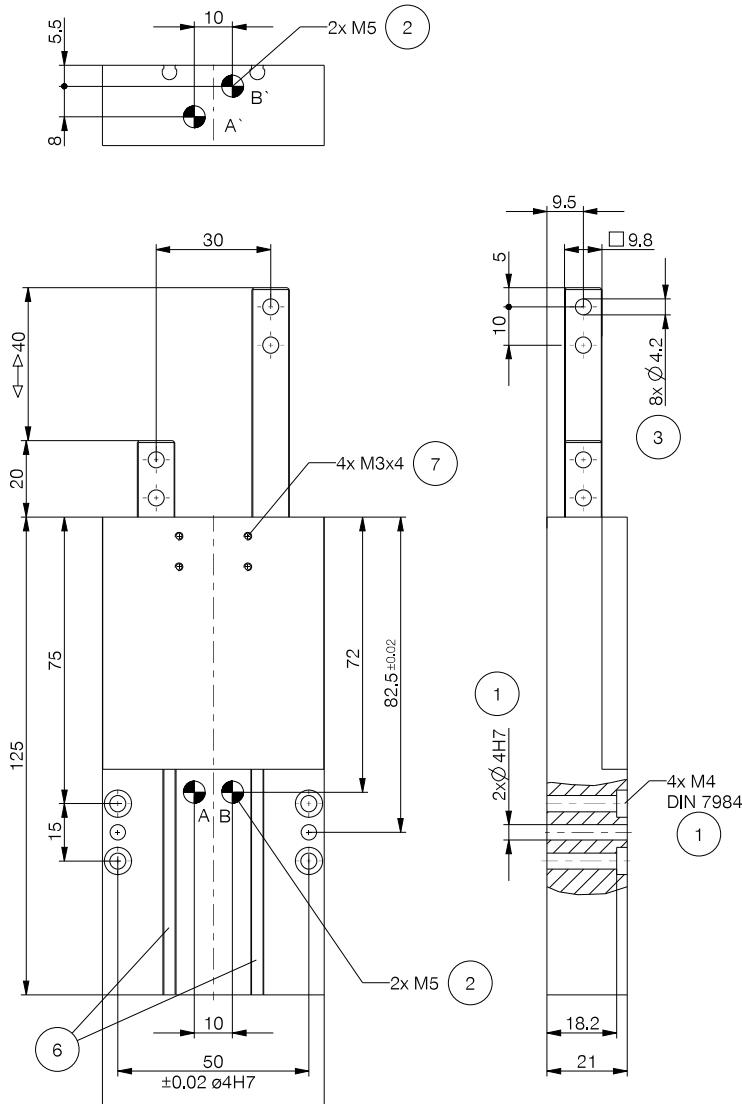


Angled Fittings - Quick
Connect Style

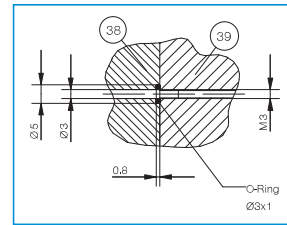
WVM5

Order no.	Technical Data*
Stroke per tapped rod [mm]	40
Force in retract [N]	65
Force in extend [N]	80
Self locking mechanism	mechanical
Cycle count [s]	0.1
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	23
Weight [kg]	0.48

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⊗ Adapter
- ⊗ Separators
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left extend/right retract)
- Ⓐ' Air connection alternativ (left retract/right extend)
- Ⓑ' Air connection alternativ (left extend/right retract)



SEPARATORS

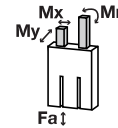
INSTALLATION SIZE VE22

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



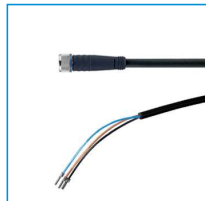
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5



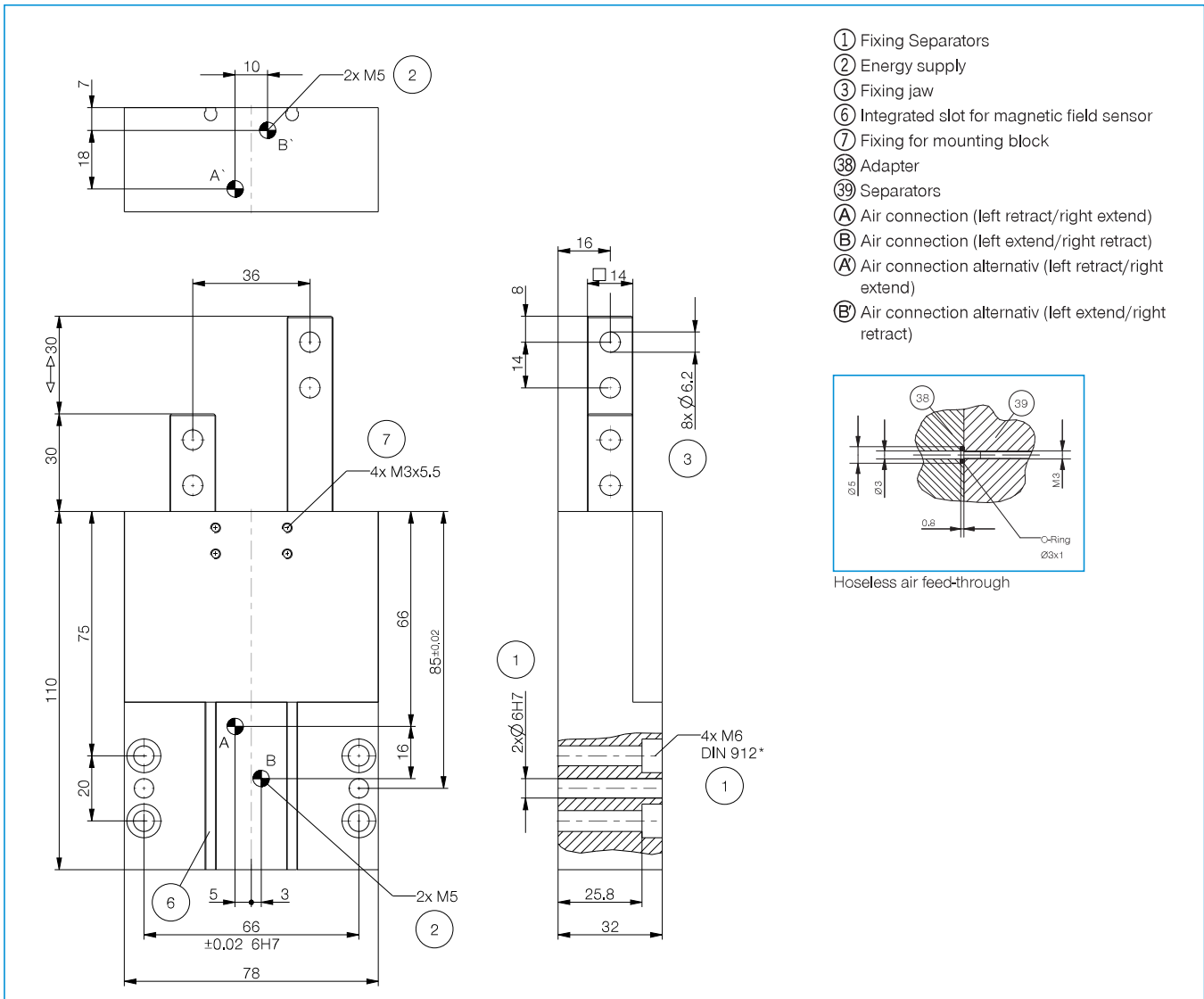
Angled Fittings - Quick
Connect Style

WVM5

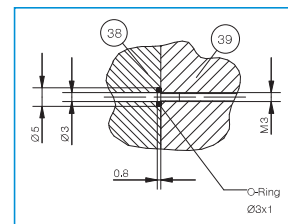
Order no.	VE22-B
Stroke per tapped rod [mm]	30
Force in retract [N]	170
Force in extend [N]	220
Self locking mechanism	mechanical
Cycle count [s]	0,08
Repetition accuracy +/- [mm]	0,05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	42
Weight [kg]	0,915

*All data measured at 6 bar

► Technical Data*



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑧ Adapter
- ③⑨ Separators
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left extend/right retract)
- Ⓐ Air connection alternativ (left retract/right extend)
- Ⓑ Air connection alternativ (left extend/right retract)



SEPARATORS

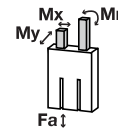
INSTALLATION SIZE VE23

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



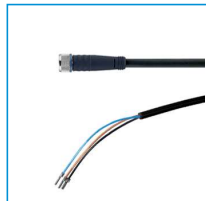
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick
Connect Style

GVM5

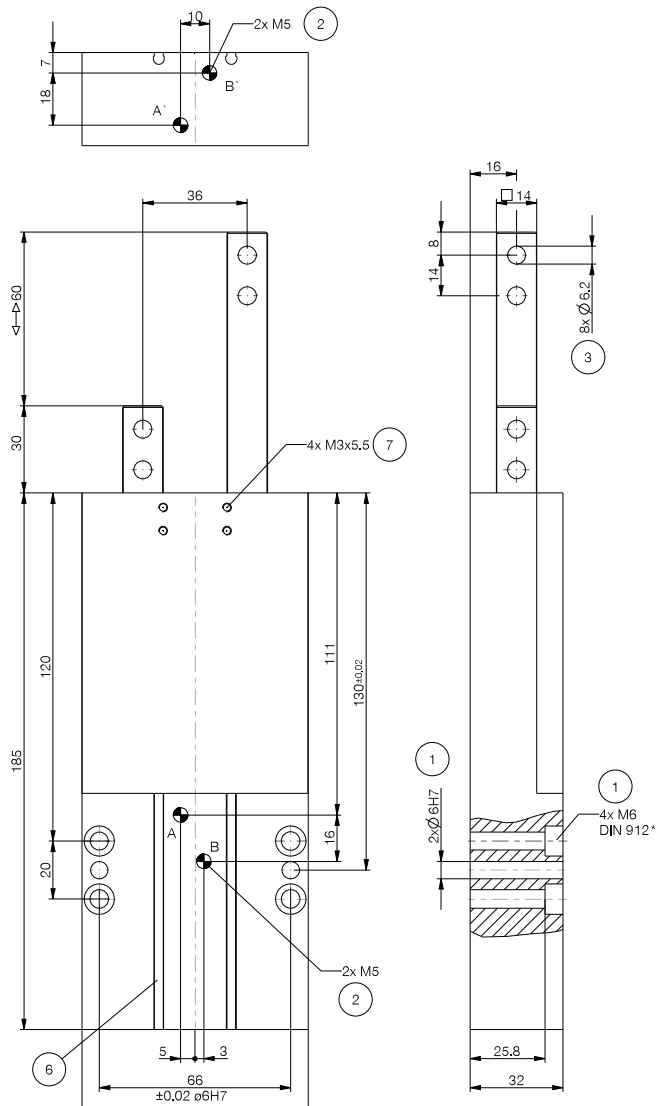


Angled Fittings - Quick
Connect Style

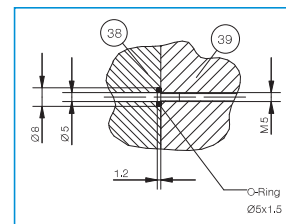
WVM5

Order no.	VE23-B
Stroke per tapped rod [mm]	60
Force in retract [N]	170
Force in extend [N]	220
Self locking mechanism	mechanical
Cycle count [s]	0.15
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	83
Weight [kg]	1.5

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑧ Adapter
- ③⑨ Separators
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left extend/right retract)
- Ⓐ' Air connection alternativ (left retract/right extend)
- Ⓑ' Air connection alternativ (left extend/right retract)



Hoseless air feed-through

SEPARATORS

OVERVIEW OF SERIES



▶ ELECTRICAL



Series VEE9200

832

SEPARATORS

SERIES VEE9200

▶ PRODUCT ADVANTAGES



▶ **250 cycles per minute**

If speed is the key, nothing beats this unit. This lets you increase your component output and lower your unit costs,

▶ **Saving energy with pulse control**

You only have to supply current briefly when retracting and extending the plunger. No energy is required at the end positions

▶ **Plug and play**

Reduce your design and programming effort to a minimum with the integrated control system and the 2-position query

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

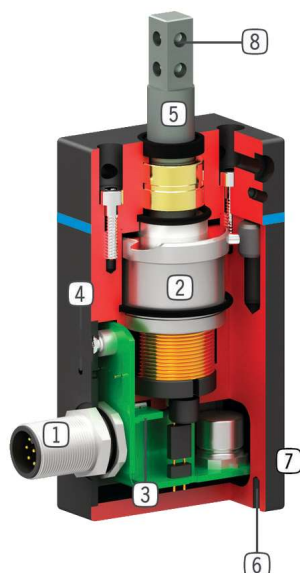
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- 1 Energy supply**
 - standardized interface M12 round connector
- 2 Drive**
 - via Pot magnet and coil bobbin according to the coil system principle
 - energy consumption only at impulse <25 ms
- 3 Position sensing**
 - integrated Hallsensor
 - 2 positions monitorable
- 4 Status control**
 - optical LED position display
- 5 Tapped rod**
 - Aluminium hardcoated
- 6 Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- 7 Robust, lightweight housing**
 - Hard-coated aluminum alloy
- 8 Mounting**
 - individual separator finger mounting

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



SEPARATORS

INSTALLATION SIZE VEE9200

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	0.3
My [Nm]	0.3
Mx [Nm]	0.3
Fa [N]	50

▶ RECOMMENDED ACCESSORIES



Plug-in Connector Angled
Cable 10 m - Female M12

KAW1000B8



Plug-in Connector
Straight Cable 10 m -
Female M12

KAG1000B8



Busbox
see page 875

ZUBBOX9000-01

Order no.	► Technical Data*	
	VEE9210	VEE9220
Permissible unevenness of mounting surface [mm]	<0.02	<0.02
Fixing for separator / Tightening torque	M3 / 1.5	M3 / 1.5
Replacement accuracy [mm]	<0,2	<0,2
Stroke [mm]	10	20
Force in retract [N]	10	8
Force in extend [N]	10	8
Permanent operation cycle count max. [cycle/min]	200	200
Cycle count max. [cycle/min]	250	250
Operating time [ms]	<18	<30
Repetition accuracy +/- [mm]	0.1	0.1
Weight of tappet extension, max. [g]	20	20
Fixing for extension piece / Tightening torque [Nm]	M3 / 1.5	M3 / 1.5
Pulse time in retract [ms]	25	35
Pulse time in extend [ms]	25	35
Debounce time [ms]	10	10
Current consumption per pulse max. [A]	5	5
Current consumption in a stand-by mode [A]	0.02	0.02
Protection to IEC 60529	IP40	IP40
Certification	CE	CE
Noise level [db(A)]	<70	<70
Operating temperature [°C]	10 ... +50	10 ... +50
Weight [kg]	0.24	0.30

*All data measured at 6 bar

