



# Hubmagnete Linear solenoids

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Die Einfach.- und Doppelhubmagnete der SLA Serie sind Geräte mit großem Leistungsvermögen. Durch die waagrechte Kennlinie stehen über den gesamten Hubverlauf hohe Zug oder Druckkräfte zur Verfügung. Die beidseitige hochwertige Lagerung des Ankers ist wartungsfrei und verschleißarm.

Hohe Leistungsdichte, geringe Abmessungen, niedrige Leistungsaufnahme bei größter Hubarbeit, kurze Schaltzeiten und eine robuste Bauart sind typisch für unsere Hubmagnete.

Eingesetzt werden unsere Hubmagnete unter anderem in der Nahrungsmittelindustrie, der Gebäudetechnik und der Automatisierung.

Alle Produkte sind gefertigt und geprüft nach DIN VDE 0580/07.2000.

Die angegebenen Magnetkräfte werden bei 90% der Nennspannung und im betriebswarmen Zustand erreicht.

**Varianten:**

Hubbereiche von 3 mm bis 20 mm  
 Kräfte von 6 bis 300 N  
 Spannungen von 12 bis 205 VDC

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The single and double lifting magnets in the SLA series are devices with high performance capability. Thanks to their horizontal characteristic, high tractive or compressive force is available over the entire course of lifting. The high quality armature bearing at both sides is maintenance-free and low-wear.

High output densities, compact dimensions, low power consumption during even the most demanding lifting works, short switch times and sturdy construction are typical of our lifting magnets.

Our lifting magnets are used in the food, building technology and automation sectors, among many others.

All products are manufactured and tested in accordance with DIN VDE 0580/07.2000.

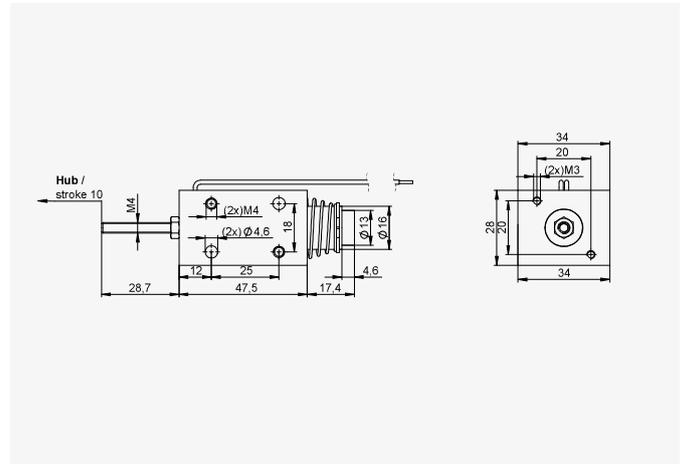
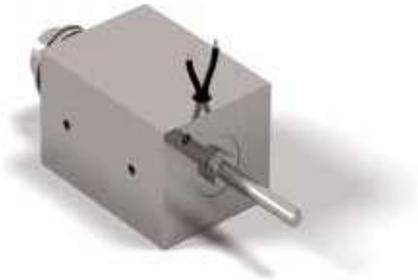
The magnetic forces stated are achieved at 90% of the nominal voltage and at operational temperature.

**Variants:**

Lifting ranges from 3 to 20 mm  
 Forces from 6 to 300 N  
 Voltages of 12 to 205 VDC

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## Single stroke solenoid SLA 034E yyy



The direct acting solenoid SLA 034E is a solid solenoid with plunger. The plunger is guided in highly wear-resistant maintenance-free precision bearings on both sides.

Housing surfaces are corrosion protected. The plunger is chemically nickel-plated. The stroke movement takes place from the stroke starting position to the stroke stop position by electromagnetic forces, whereas the reset is accomplished by a pressure spring. The force transfer should be in axial direction only. Either lateral or front mounting via threaded holes is possible.

### Type code:

SLA 034x yyy

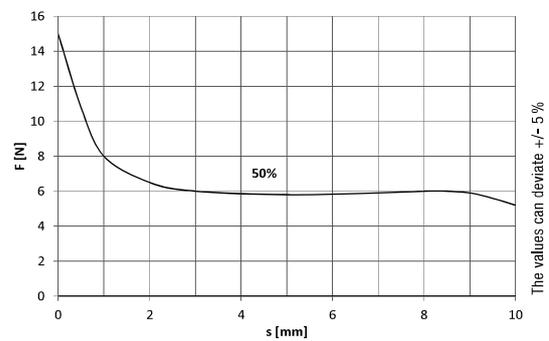
x = Type of connector  
A-DIN Connector, B-AMP Connector

yyy = Voltage  
012 = 12 V, 024 = 24 V

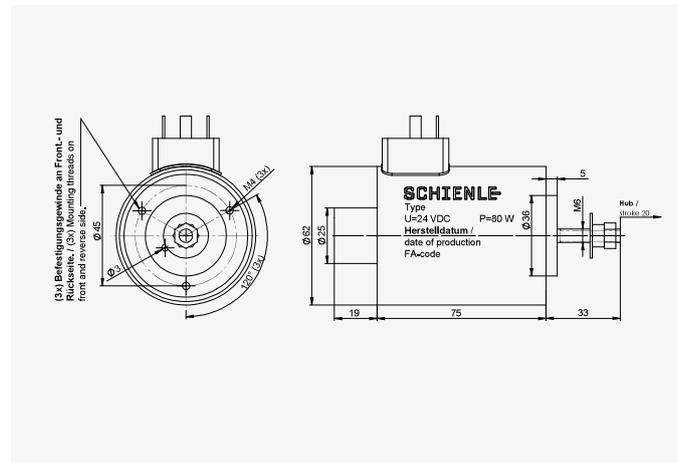
### Technical data

duty cycle [%]	50
max. ambient temperature [C°]	40
working stroke [mm]	10
nominal power [W]	16
nominal voltage [V]	24
ingress protection rating	IP 00
thermal class (coil)	F
electrical connection	flexible lead ends
surface protection	pole core and housing zinc-plated / plunger chemically nickel-plated

### Force vs. stroke diagram



## Single stroke solenoid SLA 062x yyy



The direct acting solenoid SLA 062 is a solid solenoid with plunger. The plunger is guided in highly wear-resistant maintenance-free precision bearings on both sides.

Housing surfaces are corrosion protected. The plunger is chemically nickel-plated. The stroke movement takes place from the stroke starting position to the stroke stop position by electromagnetic forces, whereas the reset is accomplished by a pressure spring. The force transfer should be in axial direction only. Either lateral or front mounting via threaded holes is possible.

Solenoids can be supplied with free cable ends (with DIN VDE 0470 / EN 60529 – IP20 protection), or with DIN 43650 connectors (with DIN VDE 0470 / EN 60529 – IP54 protection).

### Type code:

SLA 062x yyy

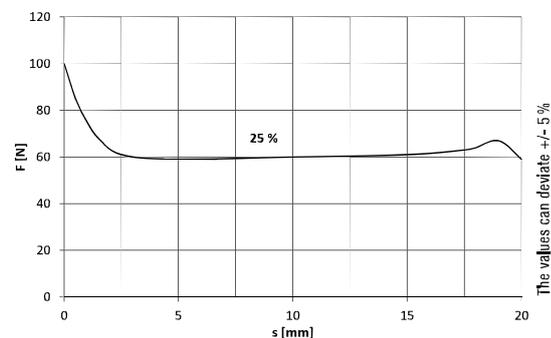
x = Type of connector  
 A-DIN Connector, B-AMP Connector

yyy = Voltage  
 012 = 12 V, 024 = 24 V

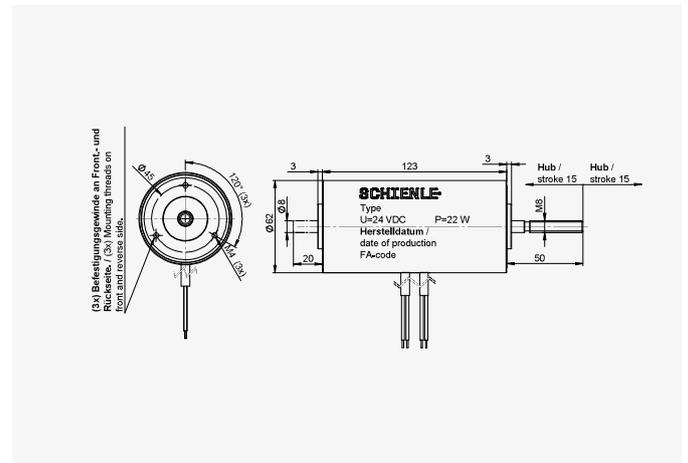
### Technical data

duty cycle [%]	25
max. ambient temperature [C°]	40
working stroke [mm]	20±0,5
nominal power [W]	80
nominal voltage [V]	12 – 205
ingress protection rating	IP 54
thermal class (coil)	F
electrical connection	DIN A
surface protection	conical cover and housing zinc-coated

### Force vs. stroke diagram



## Double stroke solenoid SLA 062E yyy A



Double acting solenoids are magnets where electromagnetic forces move the armature from the home position to one of the two stroke end positions. Return to the home position is usually carried out by external forces. On both sides, the armature is guided on maintenance-free precision bearings, ensuring a long working life. An axial power take off is important in this context. The solenoids can be supplied with free cable ends, protection class according to DIN VDE 0470/EN 60529 – IP20, or with plug connectors according to DIN 43650, protection class DIN VDE 0470/EN 60529 – IP54.

### Type code:

x = Type of connector  
A-DIN Connector, B-AMP Connector

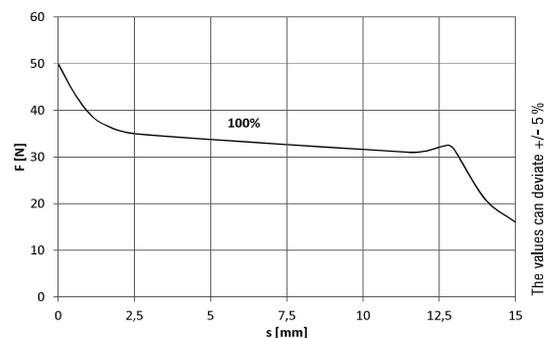
SLA 062E **yyy** A

yyy = Voltage  
012 = 12 V, 024 = 24 V

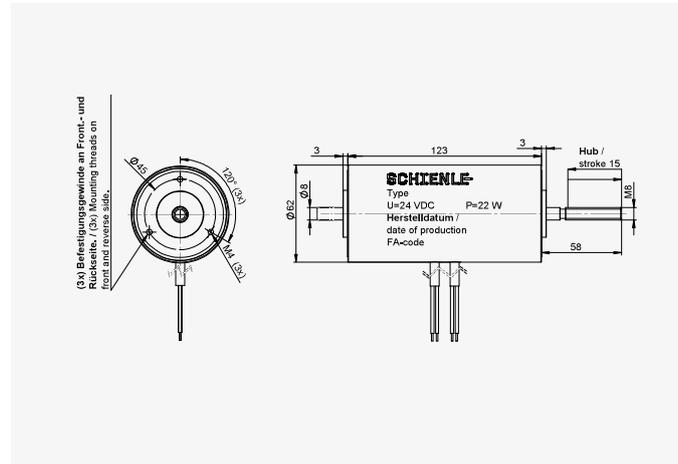
### Technical data

duty cycle [%]	100
max. ambient temperature [C°]	40
working stroke [mm]	15
nominal power [W]	22
nominal voltage [V]	12 – 205
ingress protection rating	IP20
thermal class (coil)	F
electrical connection	DIN A
surface protection	conical cover and housing zinc-coated

### Force vs. stroke diagram



## Reversal stroke solenoid SLA 062E yyy B



Reverse stroke solenoids are effective at both ends. The stroke end position of the plunger in a solenoid system is also the starting position of the stroke in another solenoid system. In this version, the plunger does not have to be reset using mechanical force. The plunger is operated at both ends in zero-maintenance precision bearings, ensuring a long lifetime. It is important that force is drawn off axially. Solenoids can be supplied with free cable ends (with DIN VDE 0470/EN 60529 – IP20 protection), or with DIN 43650 connectors (with DIN VDE 0470/EN 60529 – IP54 protection).

### Type code:

x = Type of connector  
 A-DIN Connector, B-AMP Connector

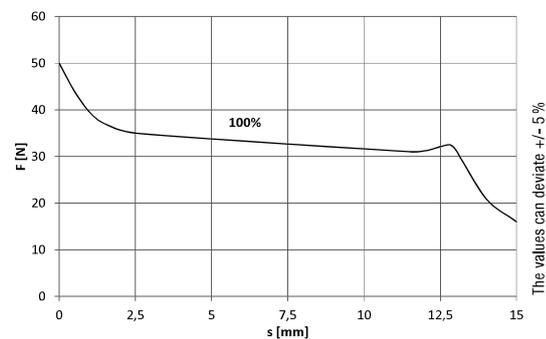
SLA 062E yyy B

yyy = Voltage  
 012 = 12 V, 024 = 24 V

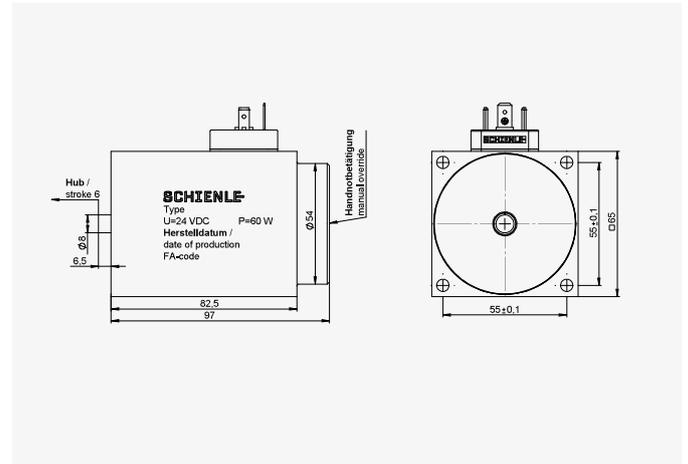
### Technical data

duty cycle [%]	100
max. ambient temperature [C°]	40
working stroke [mm]	15,5 + 1
nominal power [W]	22
nominal voltage [V]	12 – 205
ingress protection rating	IP 20
thermal class (coil)	F
electrical connection	DIN A
surface protection	conical cover and housing zinc-coated

### Force vs. stroke diagram



## Single stroke solenoid SLA 065x yyy



The force-current characteristics have enormous force capabilities and can be adapted to customer-specific demands. The axis is workable as a valve plunger or an M8 thread axis. Applications including water valves, water hydraulics, high pressure valves or other mechanical tasks with high power requirements. The mechanically and electrically robust construction guarantees a long lifespan and reliable operation, even in adverse environmental conditions.

For devices of this series, we offer extensive benefits even from medium lot sizes, like for example individual identification by serial number, with access to the inspection protocol.

Dimensions: 65 x 65 mm in two power levels: 60 W and 19 W. The technical data can be obtained from the attached table or diagram.

### Type code:

x = Type of connector  
 A-DIN Connector, B-AMP Connector

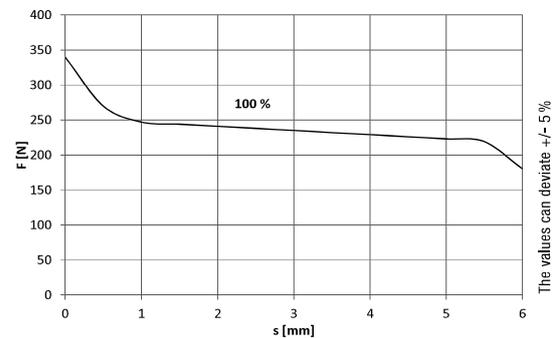
SLA 065x yyy

yyy = Voltage  
 012 = 12 V, 024 = 24 V

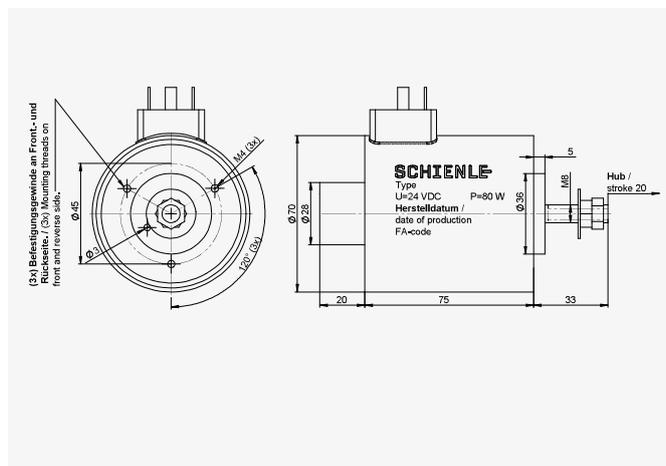
### Technical data

duty cycle [%]	100
max. ambient temperature [C°]	40
working stroke [mm]	6 $\pm$ 0,8
nominal power [W]	60
nominal voltage [V]	12 – 205
ingress protection rating	IP 65
thermal class (coil)	F
electrical connection	DIN A, B, C, AMP, DT, Desina usw.
surface protection	conical cover and housing zinc-coated

### Force vs. stroke diagram



## Single stroke solenoid SLA 070x yyy



Our single-acting solenoids are available in different versions, designed for either pulling or pushing action. The plunger must be returned to its original position using external force and is operated in zero-maintenance precision bearings, ensuring a long lifetime. It is important that force is drawn off axially.

### Type code:

x = Type of connector  
 A-DIN Connector, B-AMP Connector

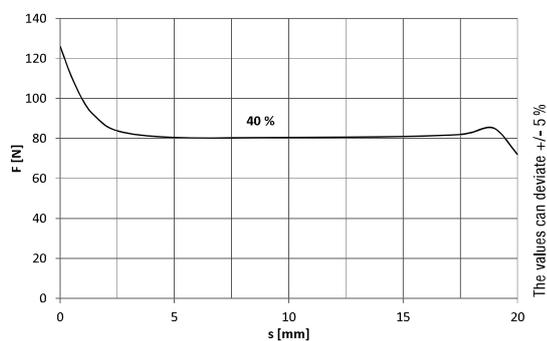
SLA 070x yyy

yyy = Voltage  
 012 = 12 V, 024 = 24 V

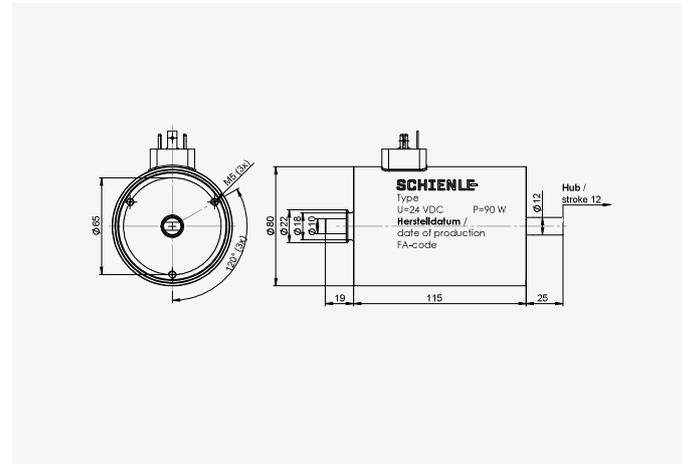
### Technical data

duty cycle [%]	40
max. ambient temperature [C°]	40
working stroke [mm]	20±0,5
nominal power [W]	80
nominal voltage [V]	12 – 205
ingress protection rating	IP 54
thermal class (coil)	F
electrical connection	DIN A
surface protection	conical cover and housing zinc-coated

### Force vs. stroke diagram



## Single stroke solenoid SLA 080x yyy



Our single-acting solenoids are available in different versions, designed for either pulling or pushing action. The plunger must be returned to its original position using external force and is operated in zero-maintenance precision bearings, ensuring a long lifetime. It is important that force is drawn off axially.

### Type code:

x = Type of connector  
A-DIN Connector, B-AMP Connector

SLA 080x yyy

yyy = Voltage  
012 = 12 V, 024 = 24 V

### Technical data

duty cycle [%]	40
max. ambient temperature [C°]	40
working stroke [mm]	12+0,6/-0,4
nominal power [W]	90
nominal voltage [V]	12 – 205
ingress protection rating	IP 67
thermal class (coil)	F
electrical connection	DIN A
surface protection	conical cover and housing zinc-coated

### Force vs. stroke diagram

