STABILUS

YOUR MOTION. OUR SOLUTION.

INDUSTRIAL POWERISE®

IPR35, IPR35 SMART, IPR40

The new class of electromechanical drives

TECHNICAL INFORMATION

LIFTING, LOWERING AND POSITIONING AT THE PUSH OF A BUTTON

CUSTOMIZED PRODUCTS FOR EVERY CHALLENGE

Production
Industrial POWERISE®
Brașov, Romania

Industrial POWERISE®
Electromechanical drives

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The future with IPR40 SMART

FEATURES

- **Internal control unit**
- **Safety according to EN ISO 13849-1**
- **CAN bus communication**

INDUSTRIAL POWERISE®
POWER MEETS CONTROL

Industrial POWERISE® is the new class of electromechanical drives for elegant, precise, and powerful motion control. They deliver safety, comfort, and protection while facilitating maintenance in a wide variety of applications.

HIGHLIGHTS AT A GLANCE

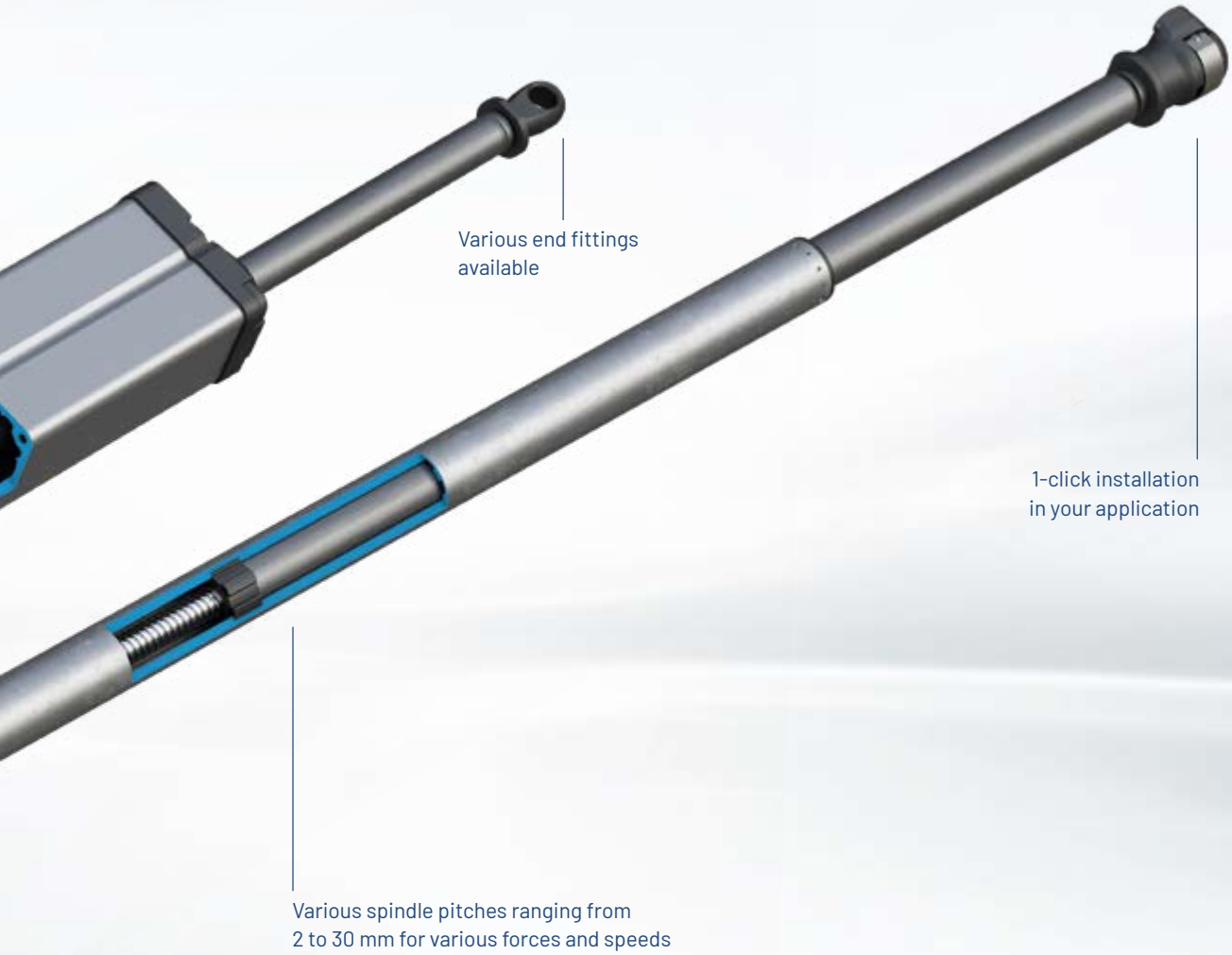
APPLICATION ENGINEERING
Partnership to develop exactly the right solution for your requirements

DRIVE PLUS GAS SPRING
Unique combination of dynamic force and load compensation
- Faster movement
- Higher weights possible
- Smoother manual movement

AVAILABLE FROM STOCK
Get the maintenance-free Industrial POWERISE® drives within short notice

SILENT MOVEMENT
Best-in-class noise reduction for sensitive environments

INDUSTRIAL POWERISE® IPR40, IPR35, IPR35 SMART



HIGHLIGHTS AT A GLANCE

INTEGRATED CONTROL

Integration of the ECU (electronic control unit) in the drive (for SMART models)

INTEGRATED SAFETY

Safe control according to EN ISO 13849-1(for IPR40 Smart and the external ECU)

AUTOMOTIVE DNA

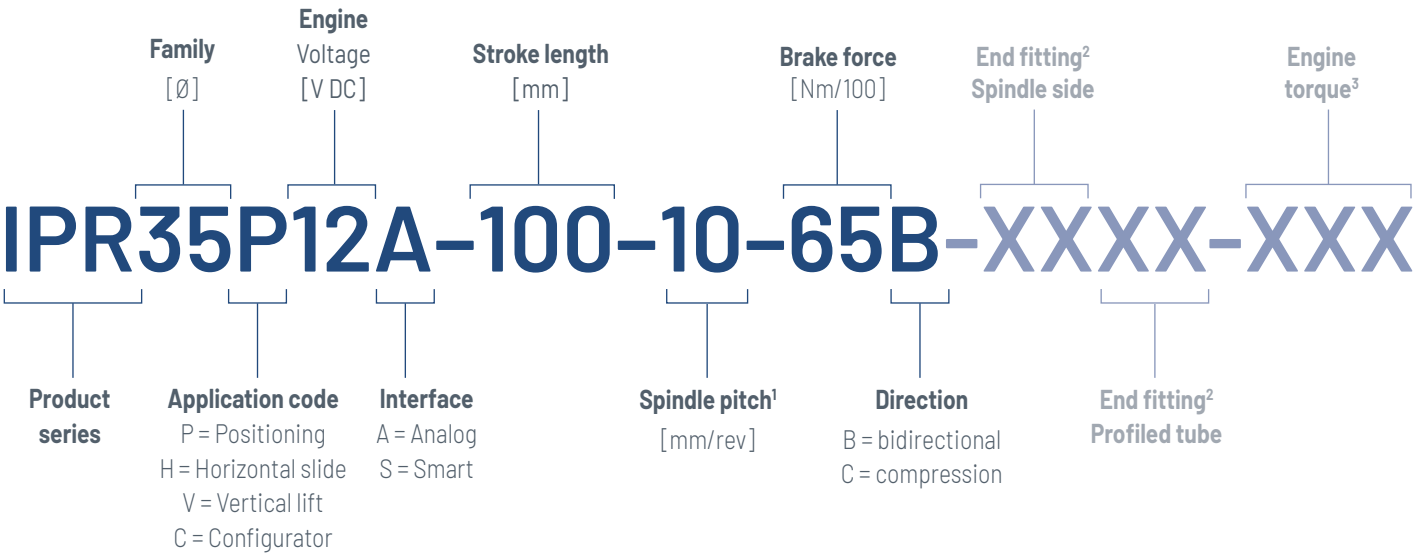
Stabilus is the #1 OEM in the industry with the IATF-certified Automotive POWERISE® drive

MODULAR SYSTEM

Custom configuration and simple adjustment on a modular basis

PRODUCT TYPE OVERVIEW

ONE PRODUCT, VARIOUS APPLICATIONS



[1] Further spindle pitches on request
[2] Not relevant for IPR35
[3] For configurator only

Description of vertical lift

- Application examples: Hoods and roofs
- Specialized for holding high compression loads and easy manual movement in extension
- Designed with compression brake only

Description of horizontal slide

- Application examples: Doors and entryways
- Low holding force for easy manual movement in either direction
- Designed with high spindle pitches and light braking force

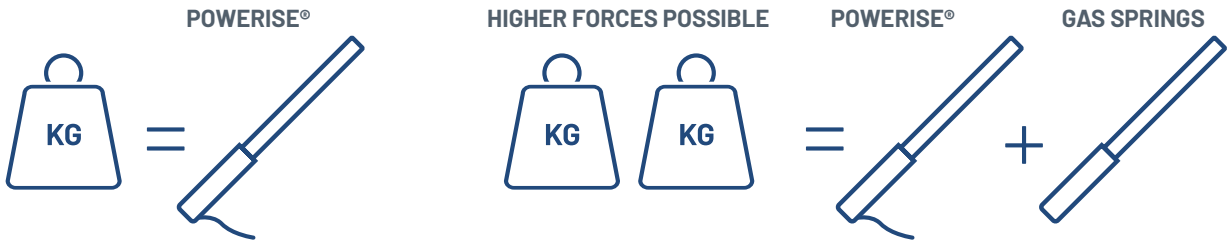
Description of positioning system

- Application examples: Traditional linear actuators, general purpose
- High holding force in both directions, containing a dual-action friction brake
- Designed with strong braking force in both directions

A COMBINATION WITH GAS SPRINGS

DYNAMIC FORCE MEETS LOAD COMPENSATION

Industrial POWERISE® delivers the dynamic force, and the gas springs add load compensation. This provides you and your application with uniquely ergonomic, force- and energy-saving and safe movement and operation – even in an emergency like a power outage. Generally, you can move objects faster while gently applying manual force. This combination opens the door to new applications that you can use to stand out from the competition.



One Industrial POWERISE® drive can be combined with different gas springs to suit a range of application sizes. The drive configuration stays identical.

INDUSTRIAL POWERISE®
IPR35, IPR35 SMART

High quality and value in every movement

Every IPR35 delivers the same lean, compact design, engineered to maximize installation flexibility across a wide range of applications. The standard model with Hall sensor feedback is ready for use with our external control unit, or the IPR35 Smart has control electronics fully integrated into the drive itself.
What sets the IPR35 apart from typical self-locking drive is their backdrive brake behavior - engineered specifically for each application - opening the door to new application possibilities with minimal manual effort, even without active power. Vertical lift actuators balance heavy loads for smooth, low-effort operation. Horizontal slide configurations minimize resistance for effortless manual movement in either direction. Positioning drives hold firmly in place where manual movement isn't desirable.

The result is a drive reliably matched to the task at hand - ready to perform exactly as each application demands.

- **IPR35: Hall sensor circuit board**
- **IPR35 Smart: Control circuit board**

TECHNICAL DATA

Operating voltage: 12 V DC or 24 V DC

Rated force range: 250 N to 1,000 N

Peak force range: 1,000 N to 4,000 N* (*on request)

Stroke range: 50 mm to 350 mm;
standard in 50 mm increments

Noise level: 55 dB (A), for general applications;
exact result is installation-dependent

Duty cycle: Max. 10%, 20 sec on, 180 sec off

Lifetime cycles: Min. 50,000 cycles, application- and load-dependent based on operating point

Operating temperature range: -30 °C to +80 °C

Storage temperature: -40 °C to +90 °C

Ingress protection class: Up to IP67, IEC 60529

Corrosion resistance: 144 hours, ISO 9227-NSS

UV Resistance: DIN EN ISO 16474-2

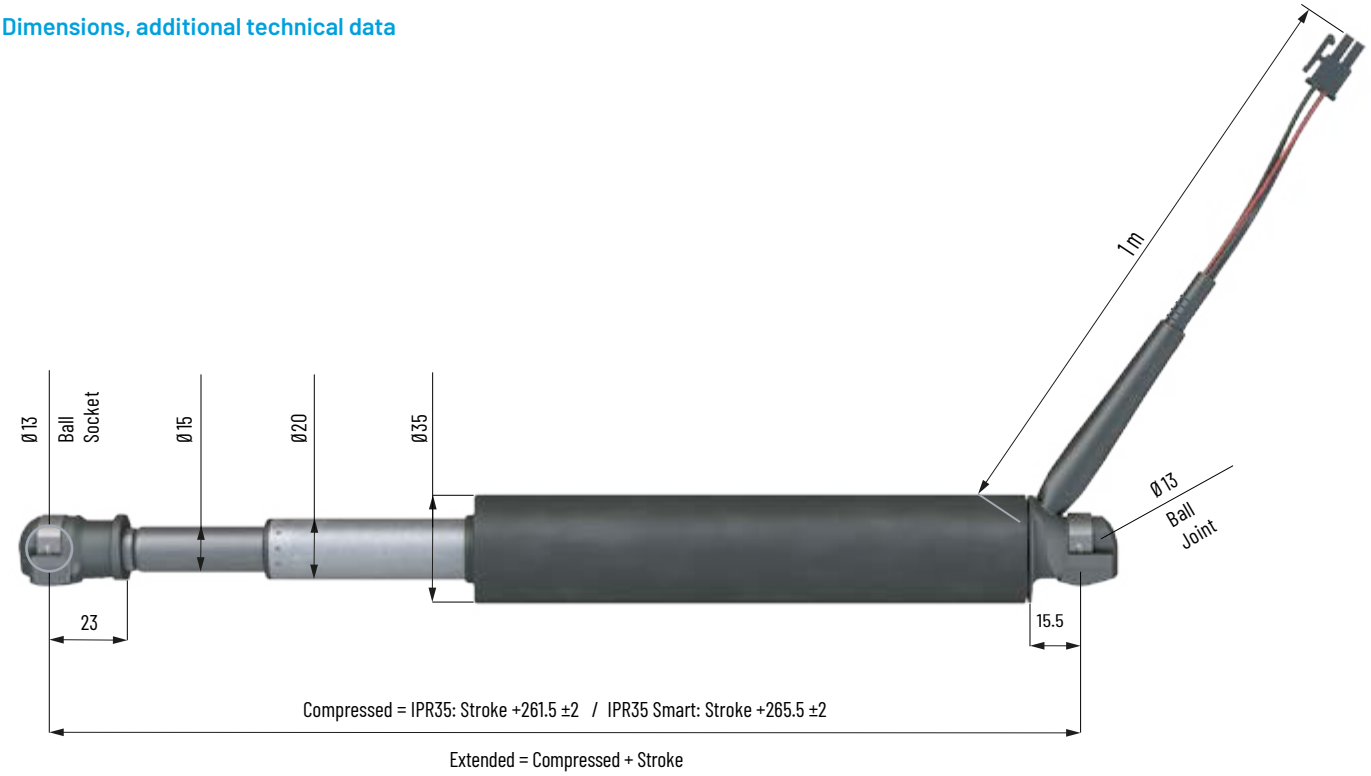
Vibration resistance: DIN EN 60068-2-64

Shock resistance: DIN EN 60068-2-27

Application areas: Agricultural vehicles, construction vehicles, buses, large trucks, material handling, motorhomes and trailers, specialty vehicles, machine and systems engineering

INDUSTRIAL POWERISE® IPR35, IPR35 SMART

Dimensions, additional technical data



Thermal protection for motor

With the bimetallic circuit breaker, you can be sure that your Industrial POWERISE® drive will not be exposed to thermal overload.

Thermal protection is crucial for the safe function and longevity of your components.

Conditions

Motor thermal protection: Automatic power cutoff via integrated thermal switch – motor function is blocked

Protection activation: 120 °C

Cable bending radius

Static bend: 37.5 mm

Continuous bend: 112.5 mm

Motor variants

	12 V motor	24 V motor
Maximum voltage[1]	16 V DC	30 V DC
Peak current (inrush or momentary use <2 s)	25.2 A	9.7 A
Nominal operating current	7 A	3.5 A

[1]See page 22 "IPR35 Smart – Electrical Interfaces" for the supply voltage range of the Smart drive."

Regulatory standards

EN 60204-1:2018 Safety of machinery - Electrical equipment of machines

EN 60335-1:2012 Household and similar electrical appliances - Safety

EN IEC 55014-1:2021 Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus

EN IEC 61000-6-3:2021 Electromagnetic compatibility (EMC) – Emission standard for equipment in residential environments

FCC Part 15 B / ICES-003 EMC Emission

IPR35 Smart: EN IEC 55014-2:2021-04-01 Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus – Immunity standard

IPR35 Smart: EN IEC 61000-6-2:2019 Electromagnetic compatibility (EMC) – Immunity standard for industrial environments

IPR35, IPR35 SMART
VERTICAL LIFT

PERFORMANCE DATA

For vertical lift [V]

				Rated			Peak[1]		Holding force	
TYPES	Spindle pitch mm/rev	Motor voltage V DC	No load speed mm/s	Compression force N	Extension force N	Speed mm/s	Compression force min. N	Extension force min. N	Extension N	Compression N
IPR35V12X[2]-XXX-15-65C	15	12	85	390	210	70	900	700	120	390
IPR35V24X[2]-XXX-15-65C	15	24	85	450	280	57	1050	950	120	390
IPR35V12X[2]-XXX-8-65C	8	12	35	750	420	28	2,000	1,700	220	760
IPR35V24X[2]-XXX-8-65C	8	24	35	880	550	23	1,900	1,600	220	760

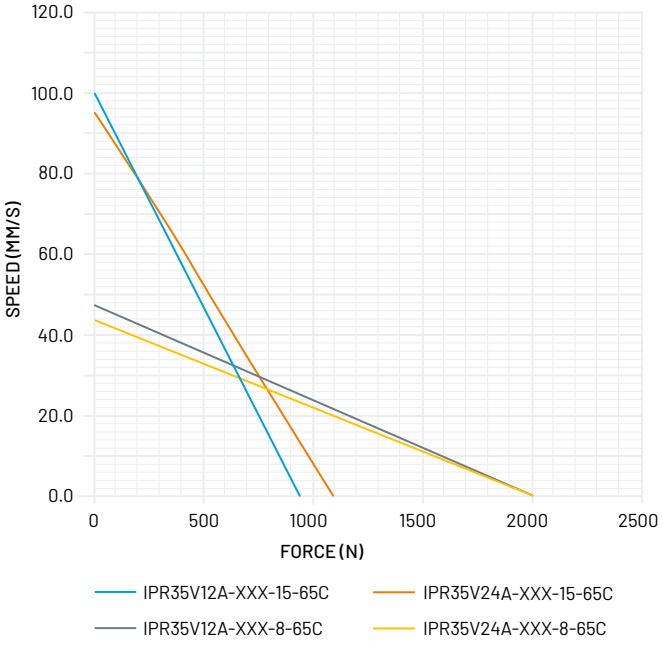
[1] Recommended no more than 2 s
[2] The variable "X" refer to types IPR35 (analog) and IPR35 SMART; see also ordering example on page 6

Individual part numbers

	Stroke / extended length						
TYPES IPR35	50 / 361.5 mm	100 / 461.5 mm	150 / 561.5 mm	200 / 661.5 mm	250 / 761.5 mm	300 / 861.5 mm	350 / 961.5 mm
IPR35V12A-XXX-15-65C	709410	709171	425953	602332	425714	425475	426192
IPR35V24A-XXX-15-65C	706064	705347	720162	187189	720401	720640	720879
IPR35V12A-XXX-8-65C	709649	709888	372895	606156	372417	373612	374807
IPR35V24A-XXX-8-65C	706303	705825	921160	188384	721357	721596	721118
TYPES IPR35 SMART	**50 / 365.5 mm**	**100 / 465.5 mm**	**150 / 565.5 mm**	**200 / 665.5 mm**	**250 / 765.5 mm**	**300 / 865.5 mm**	**350 / 965.5 mm**
IPR35V12S-XXX-15-65C	818641	817685	816729	814817	814100	812905	810276
IPR35V24S-XXX-15-65C	819836	756495	817207	815056	814578	813144	764626
IPR35V12S-XXX-8-65C	820314	821031	821509	823182	823660	824616	825094
IPR35V24S-XXX-8-65C	820553	756734	821748	823421	824377	101632	966820

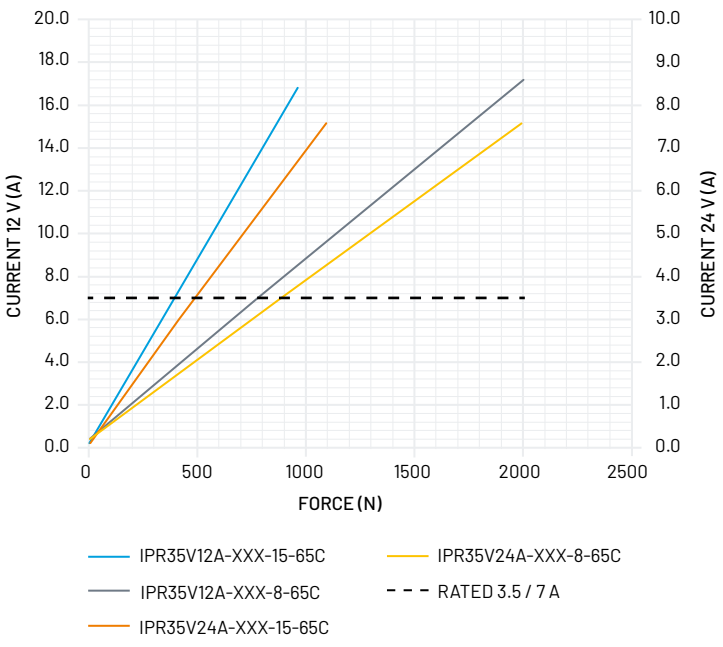
PERFORMANCE DIAGRAMS

Vertical lift – force/speed ratio



Values shown for extension movement.

Vertical lift – force/current ratio



IPR35, IPR35 SMART
HORIZONTAL SLIDE

PERFORMANCE DATA

For horizontal slide [H]

				Rated			Peak[1]		Holding force	
TYPES	Spindle pitch mm/rev	Motor voltage V DC	No load speed mm/s	Compres-sion force N	Extension force N	Speed mm/s	Compression force min. N	Extension force min. N	Extension N	Compression N
IPR35H12X[2]-XXX-15-20B	15	12	90	340	370	70	900	900	180	180
IPR35H24X[2]-XXX-15-20B	15	24	90	410	430	57	950	950	180	180

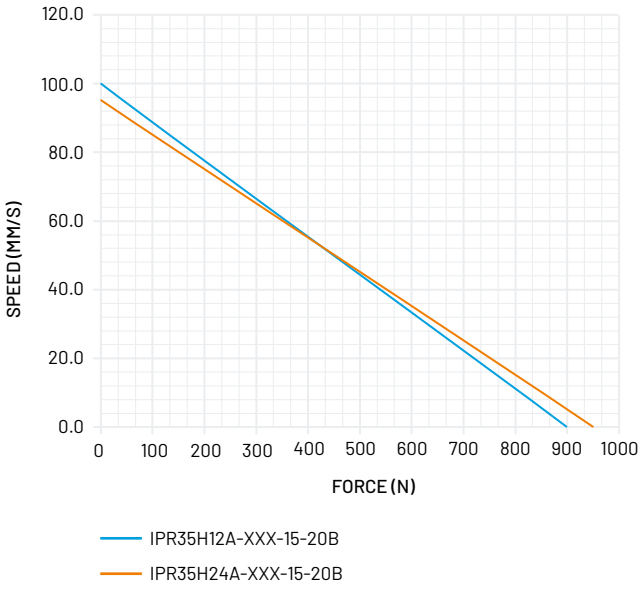
[1] Recommended no more than 2 s
[2] The variable "X" refer to types IPR35 (analog) and IPR35 SMART; see also ordering example on page 6

Individual part numbers

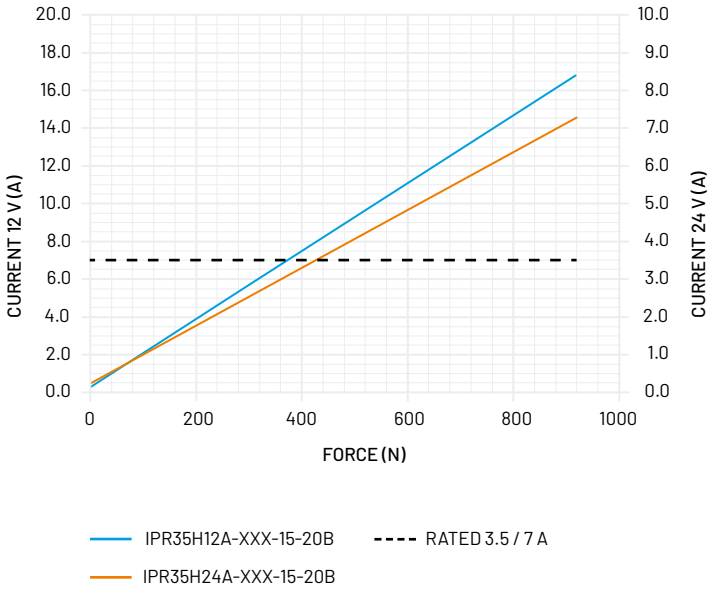
	Stroke / extended length						
TYPES IPR35	50 / 361.5 mm	100 / 461.5 mm	150 / 561.5 mm	200 / 661.5 mm	250 / 761.5 mm	300 / 861.5 mm	350 / 961.5 mm
IPR35H12A-XXX-15-20B	612144	422846	421412	601137	424997	425236	426670
IPR35H24A-XXX-15-20B	722323	715143	043553	186950	715382	716099	716338
TYPES IPR35 SMART	**50 / 365.5 mm**	**100 / 465.5 mm**	**150 / 565.5 mm**	**200 / 665.5 mm**	**250 / 765.5 mm**	**300 / 865.5 mm**	**350 / 965.5 mm**
IPR35H12S-XXX-15-20B	513674	802389	803106	807886	808364	809320	809559
IPR35H24S-XXX-15-20B	798087	802628	804301	808125	809081	096135	809798

PERFORMANCE DIAGRAMS

Horizontal slide – force/speed ratio



Horizontal slide-force/current ratio



Values shown for extension movement.

IPR35, IPR35 SMART
POSITIONING SYSTEM

PERFORMANCE DATA

For positioning system [P]

				Rated			Peak[1]		Holding force	
TYPES	Spindle pitch mm/rev	Motor voltage V DC	No load speed mm/s	Compression force N	Extension force N	Speed mm/s	Compression force min. N	Extension force min. N	Extension N	Compression N
IPR35P12X[2]-XXX-10-65B	10	12	50	280	330	46	1,100	1,100	550	550
IPR35P24X[2]-XXX-10-65B	10	24	50	380	440	38	1,250	1,250	550	550
IPR35P12X[2]-XXX-4-65B	4	12	20	630	740	18	2,300	2,300	1,680	1,680
IPR35P24X[2]-XXX-4-65B	4	24	20	860	980	15	2,400	2,400	1,680	1,680

[1] Recommended no more than 2 s
[2] The variable "X" refer to types IPR35 (analog) and IPR35 SMART; see also ordering example on page 6

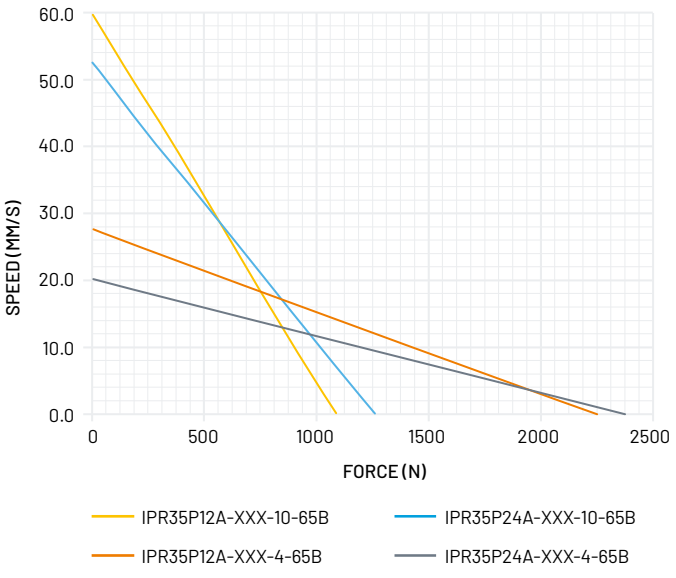
Individual part numbers

	Stroke / extended length						
TYPES IPR35	50 / 361.5 mm	100 / 461.5 mm	150 / 561.5 mm	200 / 661.5 mm	250 / 761.5 mm	300 / 861.5 mm	350 / 961.5 mm
IPR35P12A-XXX-10-65B	426909	427148	427865	593967	446268	446507	446746
IPR35P24A-XXX-10-65B	713948	703432	703193	548078	714187	714426	714665
IPR35P12A-XXX-4-65B	449375	795210	448897	*	*	*	*
IPR35P24A-XXX-4-65B	576281	547839	577476	*	*	*	*
TYPES IPR35 SMART	**50 / 365.5 mm**	**100 / 465.5 mm**	**150 / 565.5 mm**	**200 / 665.5 mm**	**250 / 765.5 mm**	**300 / 865.5 mm**	**350 / 965.5 mm**
IPR35P12S-XXX-10-65B	716588	716827	718022	718500	720173	723758	724236
IPR35P24S-XXX-10-65B	716110	717066	718261	718978	720412	095179	724714
IPR35P12S-XXX-4-65B	724953	756023	797848	*	*	*	*
IPR35P24S-XXX-4-65B	725192	759847	100206	*	*	*	*

* Please contact Stabilus

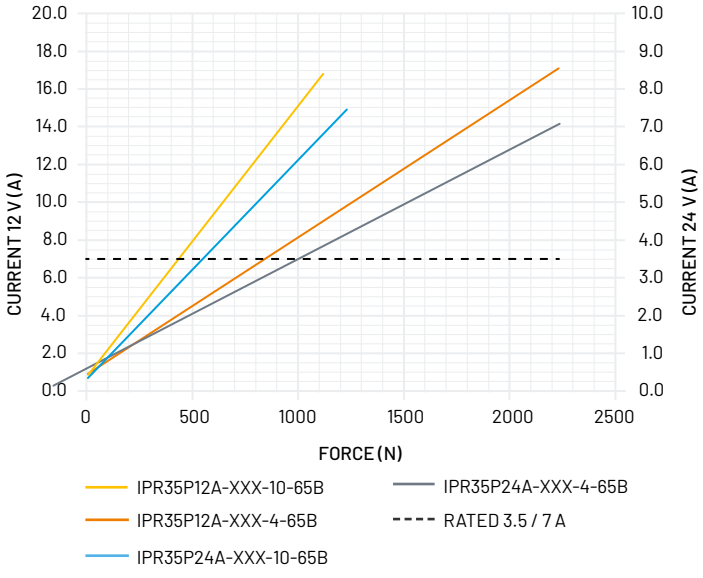
PERFORMANCE DIAGRAMS

Positioning system – force/current ratio



Values shown for extension movement.

Positioning system – force/current ratio



INDUSTRIAL POWERISE® IPR40

Customized for your applications

The Industrial POWERISE IPR40 stands for reliable automotive quality with a new, powerful design. Its modern architecture allows forces of up to 5 kN and the integration of additional functions.
Whether the drive is self-locking or features manual adjustment options, the IPR40 offers high flexibility for a broad range of applications. An integrated end-switch supports simple as well as complex control concepts, transforming the IPR40 into a versatile solution for a broad range of industrial applications.

Customize to Order

The modular design of the IPR40 allows flexible, customer-specific adaptation using different end fittings, length and strengths.

You need a drive that suits your specific needs?
Contact us!

TECHNICAL DATA

Operating voltage: 12 V DC or 24 V DC

Rated force range: 860 N to 2,750 N

Peak force range: 1,000 N to 5,000 N* (*on request)

Stroke range: 50 mm to 350 mm;
standard in 50 mm increments

Noise level: 55 dB (A), for general applications;
exact result is installation-dependent

Duty cycle: Max. 10%, 20 sec on, 180 sec off

Lifetime cycles: Min. 50,000 cycles, application- and load-dependent based on operating point

Operating temperature range: -30 °C to +80 °C

Storage temperature: -40 °C to +90 °C

Ingress protection class: Up to IP67, IEC 60529

Corrosion resistance: 144 hours, ISO 9227-NSS

UV resistance: DIN EN ISO 16474-2

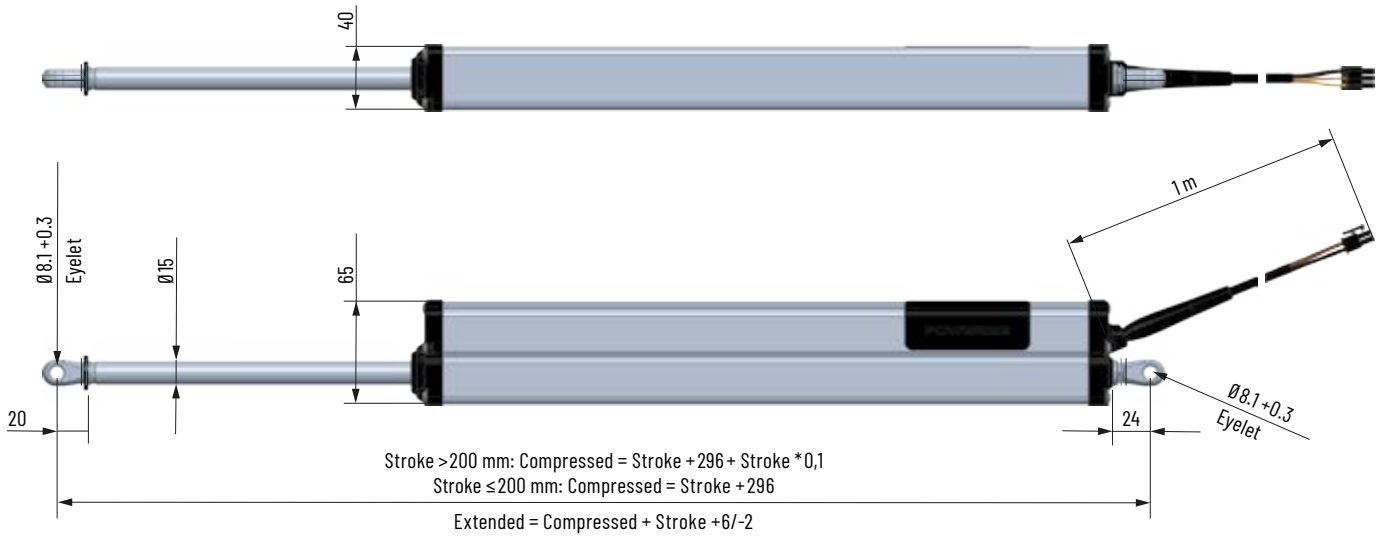
Vibration resistance: DIN EN 60068-2-64

Shock resistance: DIN EN 60068-2-27

Application areas: Agricultural vehicles, construction vehicles, buses, large trucks, material handling, motorhomes and trailers, specialty vehicles, machine and systems engineering

INDUSTRIAL POWERISE® IPR40

Dimensions, additional technical data



Thermal protection for motor

With the bimetallic circuit breaker, you can be sure that your Industrial POWERISE® drive will not be exposed to thermal overload.

Thermal protection is crucial for the safe function and longevity of your components.

Conditions

Motor thermal protection: Automatic power cutoff via integrated thermal switch – motor function is blocked

Protection activation: 120 °C

Cable bending radius

Static bend: 37.5 mm

Continuous bend: 112.5 mm

Motor variants

	12 V motor	24 V motor
Maximum voltage	16 V DC	30 V DC
Peak current (Inrush or momentary use <2 s)	25.2 A	9.7 A
Nominal operating current	7 A	3.5 A

Regulatory standards

EN 60204-1:2018 Safety of machinery – Electrical equipment of machines

EN 60335-1:2012 Household and similar electrical appliances - Safety

EN IEC 55014-1:2021 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus

EN IEC 61000-6-3:2021 Electromagnetic compatibility (EMC) – Emission standard for equipment in residential environments

FCC Part 15 B / ICES-003 EMC Emission

IPR40
VERTICAL LIFT

PERFORMANCE DATA

For vertical lift [V]

				Rated			Peak[1]		Holding force	
TYPES	Spindle pitch mm/rev	Motor voltage V DC	No load speed mm/s	Compression force N	Extension force N	Speed mm/s	Compression force min. N	Extension force min. N	Extension N	Compression N
IPR40-V-24A-XXX-6-65C	6	24	33	1130	710	17	2,260	1,900	270	970

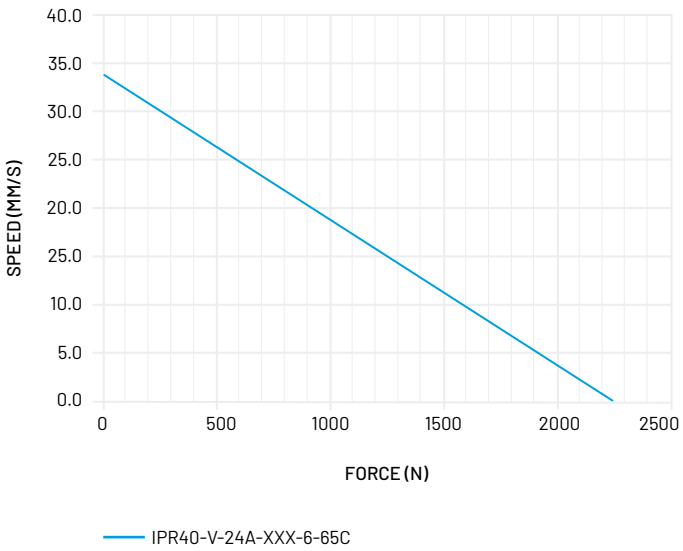
[1] Recommended no more than 2 s

Individual part numbers

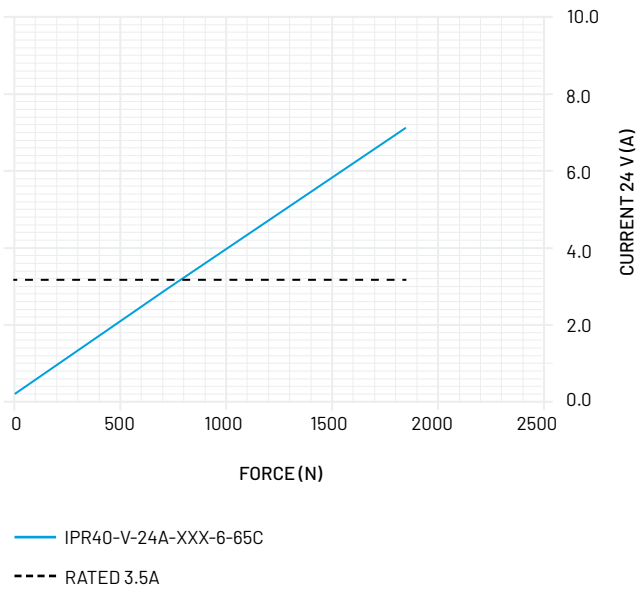
	Stroke / extended length						
TYPES	50 / 396 mm	100 / 496 mm	150 / 596 mm	200 / 696 mm	250 / 821 mm	300 / 926 mm	350 / 1,031 mm
IPR40-V-24A-XXX-6-65C	958216	958455	958694	958933	959172	959411	994066

PERFORMANCE DIAGRAMS

Vertical lift – force/speed ratio



Vertical lift – force/current ratio



Values shown for extension movement.

IPR40
POSITIONING SYSTEM

PERFORMANCE DATA

For positioning system [P]

				Rated			Peak[1]		Holding force	
TYPES	Spindle pitch mm/rev	Motor voltage V DC	No load speed mm/s	Compression force N	Extension force N	Speed mm/s	Compression force min. N	Extension force min. N	Extension N	Compression N
IPR40-P-24A-XXX-4-65B	4	24	20	860	950	15	2,400	2,400	1,680	1,680
IPR40-P-24A-XXX-2-20B	2	24	10	2,650	2,750	6	5,000	5,000	self-locking[2]	self-locking[2]

[1] Recommended no more than 2 s
[2] Max holding force 4,500 N

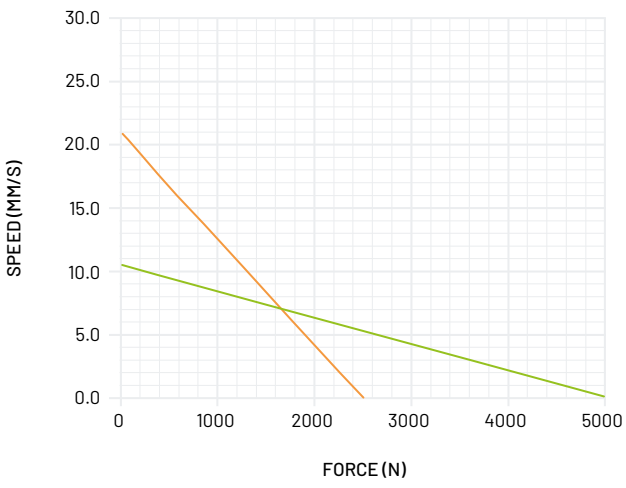
Individual part numbers

	Stroke / extended length						
TYPES	50 / 396 mm	100 / 496 mm	150 / 596 mm	200 / 696 mm	250 / 821 mm	300 / 926 mm	350 / 1,031 mm
IPR40-P-24A-XXX-4-65B	074155	093992	108571	120760	129842	165692	055035
IPR40-P-24A-XXX-2-20B	287343	291645	292840	294274	295230	296425	*

* Please contact Stabilus

PERFORMANCE DIAGRAMS

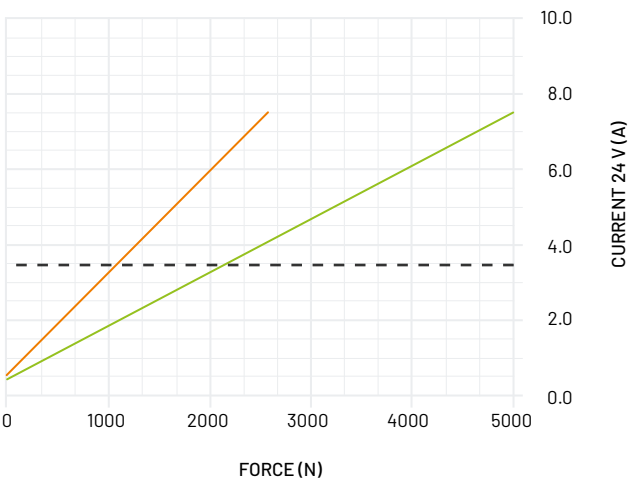
Positioning system – force/current ratio



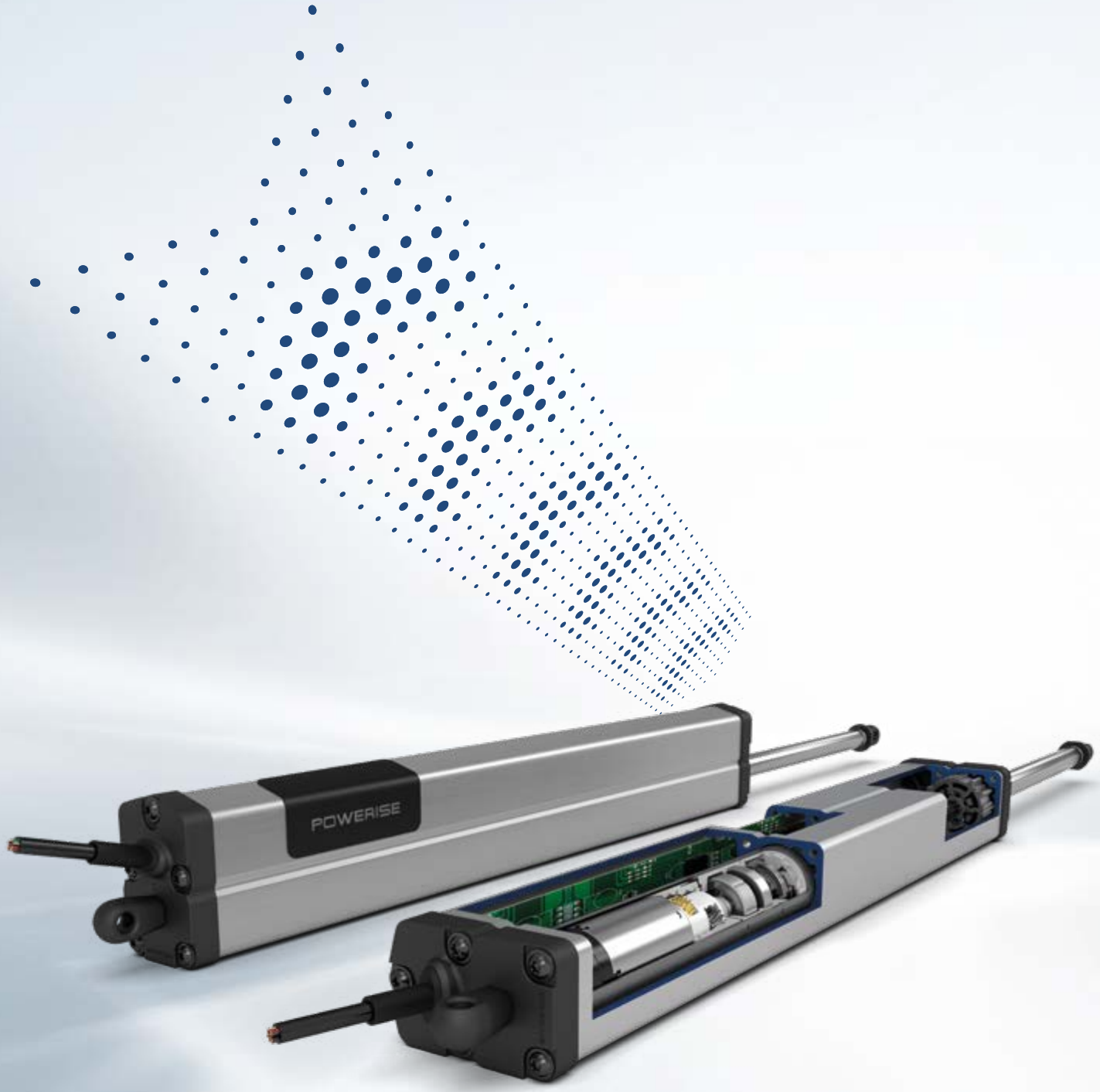
IPR40-P-24A-XXX-2-20B
IPR40-P-24A-XXX-4-65B

Values shown for extension movement.

Positioning system – force/current ratio



IPR40-P-24A-XXX-2-20B
IPR40-P-24A-XXX-4-65B
RATED 3.5A / 7A


POWERISE

IPR35, IPR35 SMART
MECHANICAL INTERFACE

MAKE YOUR CONNECTIONS!

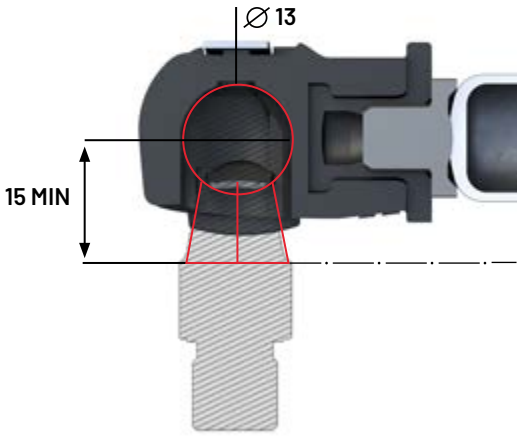
End fittings

Type: 13 mm ball socket with clip

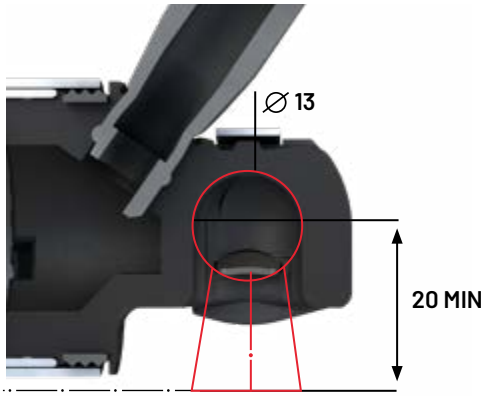
Orientation: 360° rotation on spindle tube end, body side fixed orientation

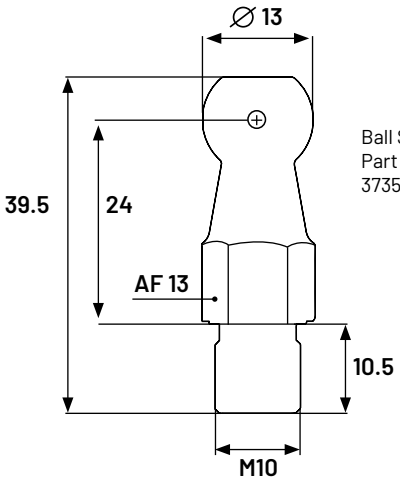
Mounting static bend: Requiring height clearance 20 mm on body end

Spindle tube

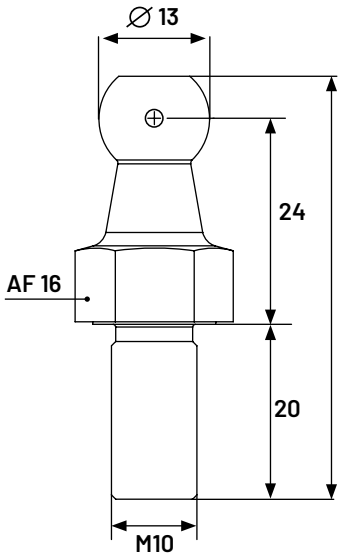


Motor side





Ball Stud
Part Number:
373597

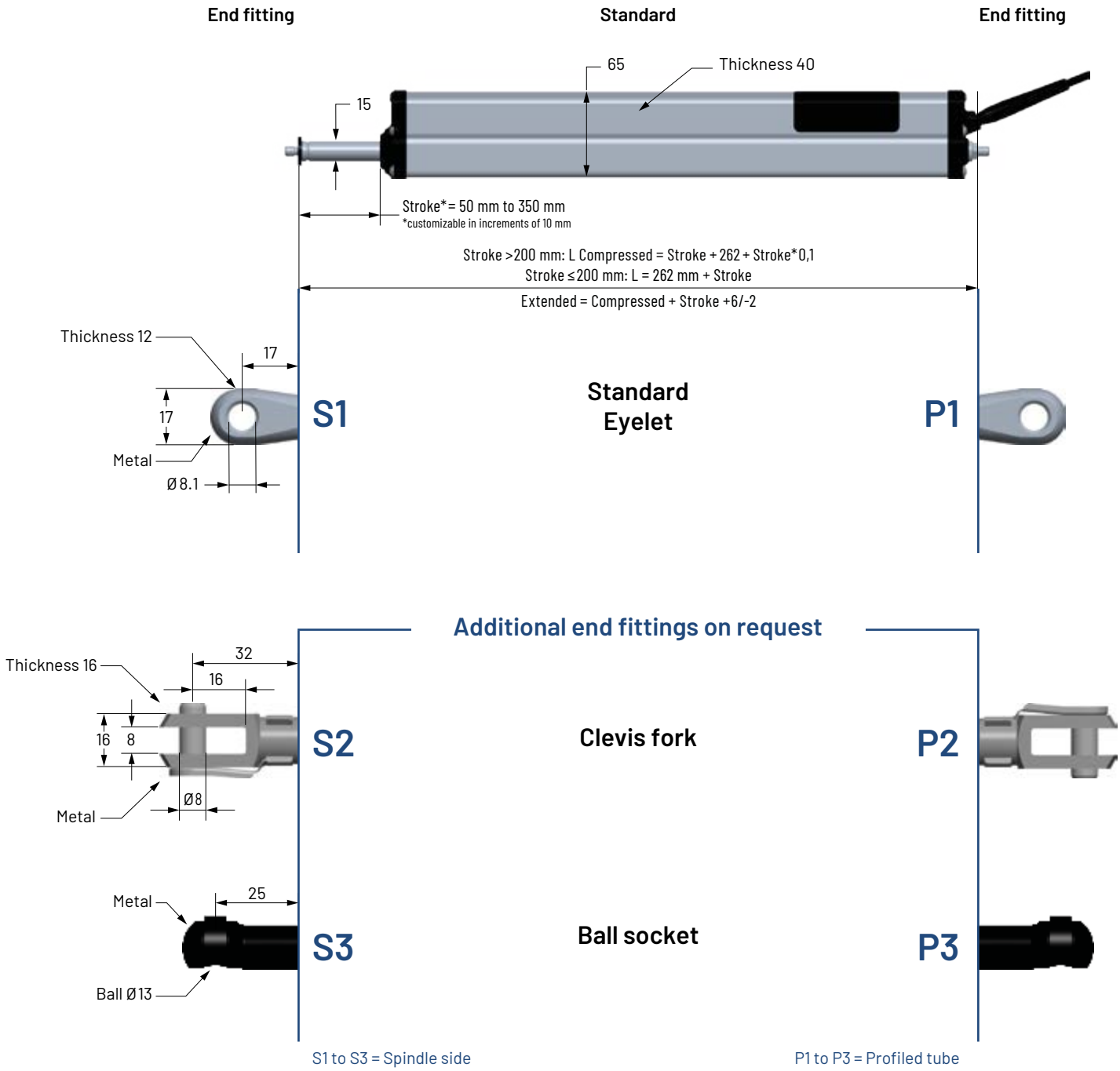


Ball Stud
Part Number:
214683

Customize to Order

IPR40
MECHANICAL INTERFACE

MAKE YOUR CONNECTIONS!



IPR35, IPR40
ELECTRICAL INTERFACES

MAKE YOUR CONNECTIONS!

Technical data

Hall sensor resolution: 5 pulses/rev

Hall sensor supply voltage: 4–24 V DC

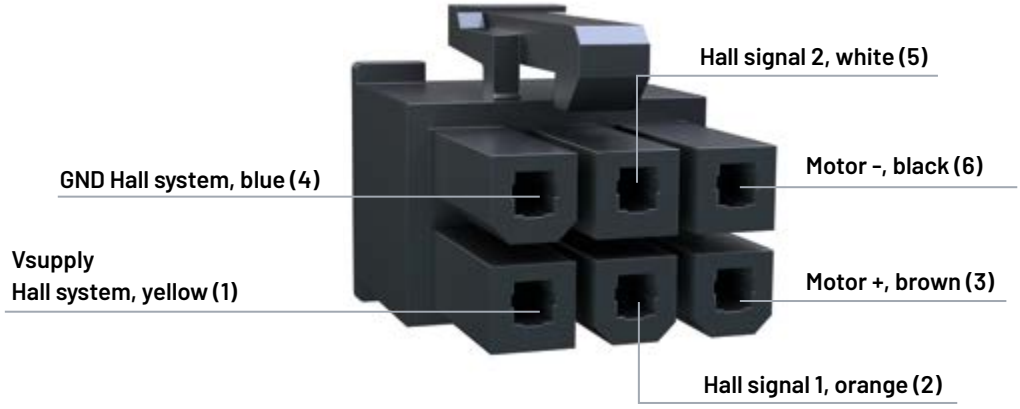
Motor PWM input: 8–20 kHz

Connector specification: Molex Mini-Fit Jr. 6-pin (46992-0610)

Polarity assignment

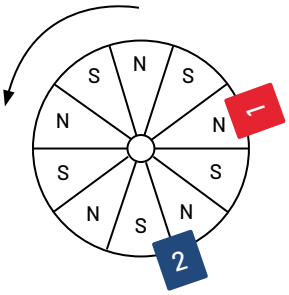
	Plug pin	Polarity
Spindle drive extends	3	+
	6	-

Pin assignment



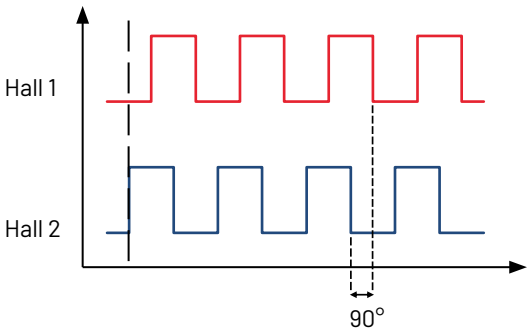
Hall sensor system

- Incremental Hall sensors for position and speed control
- Open-drain outputs
- Phase shift between the two signals indicates direction of rotation



Rotating 10-pole ring magnet

Hall signals (spindle drive extends)



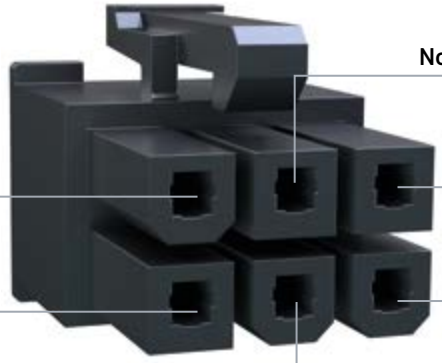
IPR35 SMART
ELECTRICAL INTERFACES

MAKE YOUR CONNECTIONS!

Technical data

Connector specification: Molex Mini-Fit Jr. 6-pin (46992-0610)
Operating voltage range: (24 V motor): 21 V DC to 28 V DC
Operating voltage range: (12 V motor): 9 V DC to 16 V DC
No-load current: 6.5 mA

Pin assignment



* Is only required for the parallel operation of multiple drives and parametrization

IPR35 SMART
Connection cable

Lead with open end 2 m
Part number: 543545

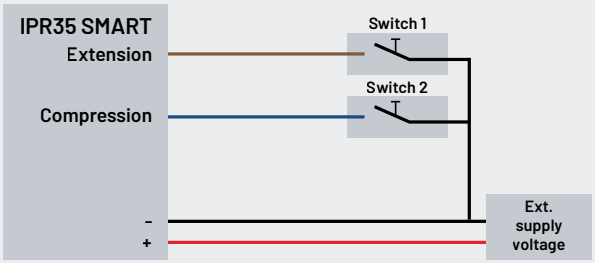
Lead with open end 5 m
Part number: 234286

IPR35 SMART
Electrical Interfaces

APPLICATION POSSIBILITIES

The motor control unit integrated in the IPR35 Smart requires no external control unit.

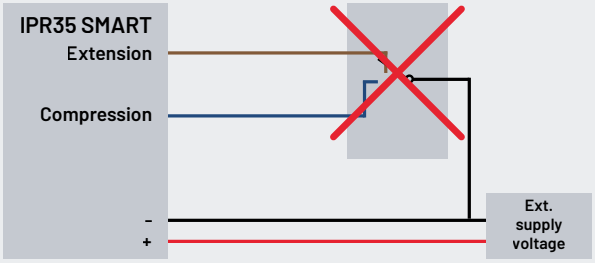
The drive can be controlled directly by two switches that switch a GND signal.



Instead of two switches, the IPR35 Smart can also be operated via SPS outputs, relays or other digital outputs that supply a GND signal.

An important limitation is that there must be a zero position in order to ensure that neither of the two inputs is connected to GND, especially when the voltage is switched on.

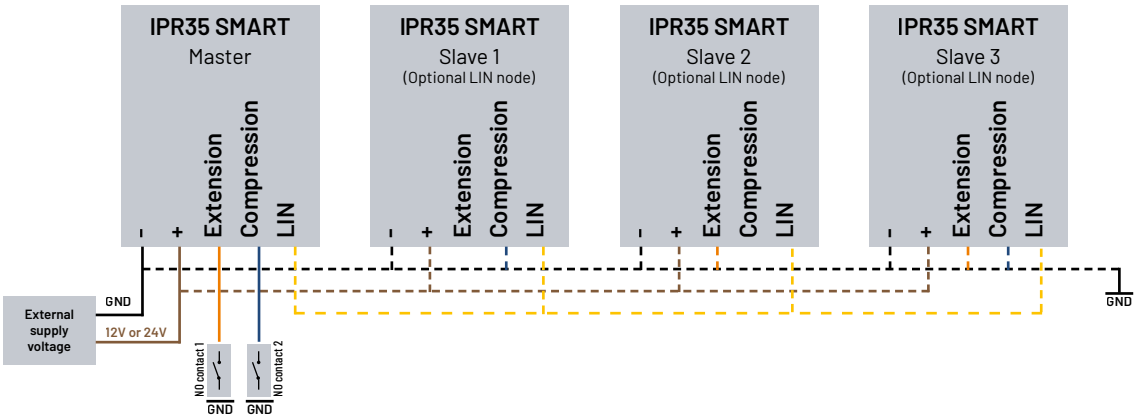
That means that a toggle switch with two switch positions is not suitable.



PARALLEL OPERATION OF UP TO 4 DRIVES

In order to operate up to 4 drives in parallel, they must be connected to each other via the LIN end fittings.

The inputs for *extension and compression* of only one of the drives (LIN master) should be connected to the external operating interface (e.g., switch). The inputs for the other drives should be connected as shown in the diagram and the table below



LIN node	Configuration of the input for extension	Configuration of the input for compression
Master	Switch contact connected to GND, not actuated	Switch contact connected to GND, not actuated
Slave 1	high-impedance, open	connected to GND
Slave 2	connected to GND	high-impedance, open
Slave 3	connected to GND	connected to GND

STANDARD ECU – IPR35, IPR40

YOUR COMPLETE SINGLE-SOURCE SOLUTION

The controller has been specifically developed by Stabilus for POWERISE® and is manufactured in Germany. It enables the automatic control of two POWERISE® actuators in parallel. Users benefit from three different operation modes:

- **Push-and-Hold = "Jog mode"**
- **Single push (automatic) = simple touch operation**
- **Tip-to-Start = initiate by manual movement**

Technical data

Specification	Value	Units	Notes
Operating voltage	24	V DC	12 V is available for vehicle usage
Number of actuators	1-2		Driven in parallel
Nominal current*	10	A	
Dimensions	132 × 91 × 43	[W x L x H] mm	
Ingress protection rating	IP20		ISO 20653
End fittings	Molex MiniFit Jr.		
Input	Normally open contacts		1 input for extension, 1 input for compression, 1 input for end switch

* Peak current 20 A

Functions

- Closed loop speed control
- Virtual end stop
- Soft start & stop
- Allows manual movement

Protection and safety features

- Overheat
- Voltage and current level
- Misuse – dynamic brake for overspeed
- Obstacle detection
  - Reversing after a collision
  - Overload detection
- Synchronous check (for two actuators)

Regulatory standards

- EN 60335-1:2012 Household and similar electrical appliances
- EN ISO 13849-1:2023 Safety of machinery - Safety-related parts of control systems*
- EN IEC 55014-1:2021 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus
- EN IEC 55014-2:2021 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus
- EN IEC 61000-6-2:2019 Electromagnetic compatibility (EMC) – Immunity standard for industrial environments
- EN IEC 61000-6-3:2021 Electromagnetic compatibility (EMC) – Emission standard for equipment in residential environments
- FCC Part 15 B / ICES-003 EMC Emission

* Depending on the appropriate integration and parametrization of the control unit, it can be used for a performance level up to PL c. For more information, refer to the manual of the control unit

Standard ECU system components

Industrial POWERISE® components – Overview

Components	Material number
1 Mechanical end-switch	180244
2 Push button	529444
3 Power supply, 230/110 V AC, 24 V DC	285881
4 Mains cable length 1.80 m	DE/EU 913735; UK 651803; US 651564
5 Standard ECU 24 V	375289
6 Standard ECU 12 V	210619
7 Powerise Link+	591591

Connection cable and further components are available on request

IPR35, IPR35 SMART, IPR40
Powerise Link+ and Link App

Powerise Link+ is a programming adapter for the control unit.
With the Link App, users can independently configure over 200 parameters.

Parameterization

- Closed loop speed control
- Obstacle detection
- Overload detection
- Slam protection
- Acoustic signals
- ...

IPR35 SMART

Functions and features

- Closed loop speed control
- Push-and-Hold = "Jog mode"
- Allows manual override
- Protection against improper use – dynamic braking at excessively high speeds
- Overload and obstacle detection
- Operate 4 drives synchronously

FROM OUR CATALOG

THE RIGHT IPR35, IPR35 SMART DATA FOR YOUR APPLICATION

Performance data

		Rated			Peak[1]		Holding force	
IPR35								
Application category	**TYPES**	Compression force **N**	Extension force **N**	Speed **mm/s**	Compression force min. **N**	Extension force min. **N**	Extension **N**	Compression **N**
Vertical lift	IPR35V12A-XXX-15-65C	390	210	70	900	700	120	390
	IPR35V24A-XXX-15-65C	450	280	57	1,050	950	120	390
	IPR35V12A-XXX-8-65C	750	420	28	2,000	1,700	220	760
	IPR35V24A-XXX-8-65C	880	550	23	1,900	1,600	220	760
Horizontal slide	IPR35H12A-XXX-15-20B	340	370	70	900	900	180	180
	IPR35H24A-XXX-15-20B	410	430	57	950	950	180	180
Positioning systems	IPR35P12A-XXX-10-65B	280	330	46	1,100	1,100	550	550
	IPR35P24A-XXX-10-65B	380	440	38	1,250	1,250	550	550
	IPR35P12A-XXX-4-65B	630	740	18	2,300	2,300	1,680	1,680
	IPR35P24A-XXX-4-65B	860	980	15	2,400	2,400	1,680	1,680
IPR35 SMART								
Application category	**TYPES**	Compression force **N**	Extension force **N**	Speed **mm/s**	Compression force min. **N**	Extension force min. **N**	Extension **N**	Compression **N**
Vertical lift	IPR35V12S-XXX-15-65C	390	210	70	900	700	120	390
	IPR35V24S-XXX-15-65C	450	280	57	1,050	950	120	390
	IPR35V12S-XXX-8-65C	750	420	28	2,000	1,700	220	760
	IPR35V24S-XXX-8-65C	880	550	23	1,900	1,600	220	760
Horizontal slide	IPR35H12S-XXX-15-20B	340	370	70	900	900	180	180
	IPR35H24S-XXX-15-20B	410	430	57	950	950	180	180
Positioning systems	IPR35P12S-XXX-10-65B	280	330	46	1,100	1,100	550	550
	IPR35P24S-XXX-10-65B	380	440	38	1,250	1,250	550	550
	IPR35P12S-XXX-4-65B	630	740	18	2,300	2,300	1,680	1,680
	IPR35P24S-XXX-4-65B	860	980	15	2,400	2,400	1,680	1,680

*Please contact Stabilus
[1] Recommended no more than 2 s

Individual part numbers

Stroke / extended length						
50 / 361.5 **mm**	100 / 461.5 **mm**	150 / 561.5 **mm**	200 / 661.5 **mm**	250 / 761.5 **mm**	300 / 861.5 **mm**	350 / 961.5 **mm**
709410	709171	425953	602332	425714	425475	426192
706064	705347	720162	187189	720401	720640	720879
709649	709888	372895	606156	372417	373612	374807
706303	705825	921160	188384	721357	721596	721118
612144	422846	421412	601137	424997	425236	426670
722323	715143	043553	186950	715382	716099	716338
426909	427148	427865	593967	446268	446507	446746
713948	703432	703193	548078	714187	714426	714665
449375	795210	448897	*	*	*	*
576281	547839	577476	*	*	*	*
50 / 365.5 **mm**	100 / 465.5 **mm**	150 / 565.5 **mm**	200 / 665.5 **mm**	250 / 765.5 **mm**	300 / 865.5 **mm**	350 / 965.5 **mm**
818641	817685	816729	814817	814100	812905	810276
819836	756495	817207	815056	814578	813144	764626
820314	821031	821509	823182	823660	824616	825094
820553	756734	821748	823421	824377	101632	966820
513674	802389	803106	807886	808364	809320	809559
798087	802628	804301	808125	809081	96135	809798
716588	716827	718022	718500	720173	723758	724236
716110	717066	718261	718978	720412	095179	724714
724953	756023	797848	*	*	*	*
725192	759847	100206	*	*	*	*

*Please contact Stabilus

FROM OUR CATALOG

THE RIGHT IPR40 DATA FOR YOUR APPLICATION

Performance data

		Rated			Peak[1]		Holding force	
IPR40								
Application category	**TYPES**	Compression force **N**	Extension force **N**	Speed **mm/s**	Compression force min. **N**	Extension force min. **N**	Extension **N**	Compression **N**
Vertical lift	IPR40-V-24A-XXX-6-65C	1,130	710	17	2,260	1,900	270	970
Positioning systems	IPR40-P-24A-XXX-4-65B	860	950	15	2,400	2,400	1,680	1,680
	IPR40-P-24A-XXX-2-20B	2,650	2,750	6	5,000	5,000	Self Locked[2]	Self Locked[2]

*Please contact Stabilus
[1] Recommended no more than 2 s
[2] Max holding force 4,500 N

Info:
Not yet found an IPR40 model just right for you?
Every IPR35 model can also be custom-configured as an IPR40.

Individual part numbers

	Stroke / extended length						
	50 / 396 **mm**	100 / 496 **mm**	150 / 596 **mm**	200 / 696 **mm**	250 / 821 **mm**	300 / 926 **mm**	350 / 1031 **mm**
	958216	958455	958694	958933	959172	959411	994066
	074155	093992	108571	120760	129842	165692	055035
	287343	291645	292840	294274	295230	296425	*

*Please contact Stabilus

STABILUS 4 AUTOMATION

FLEXIBILITY
ADJUSTMENT WITH-OUT COMPROMISE

INCREASED VALUE

Stabilus4Automation offers flexibility with standardized products featuring multiple options. In addition, quick delivery from stock is possible along with any individualized custom production necessary.

More about Stabilus4Automation >

We have developed flexible platforms that are adaptable to the diverse set of requirements across a broad range of industries.

OUR APPROACH TO FLEXIBILITY

- **Custom-configurable POWERISE drives**
- **Smallest quantities can be delivered within 48 hours**
- **Quick provision of samples**
- **Platform-based adaptation ensures cost-efficiency**
- **Customized solutions for industry**

ACE
A STABILUS COMPANY

More about POWERISE at expert brand ACE >

Individual orders possible within 48 hours.

HAHN GASFEDERN
A STABILUS COMPANY

More about POWERISE at expert brand Hahn>

Customized to Order program including configurations of custom solutions.

We are also able to develop custom solutions for even the smallest quantities while, at the same time, providing samples quickly.

THAT'S HOW WE KEEP RAISING THE BAR IN MOTION CONTROL.

STABILUS REQUEST FORM
INDUSTRIAL POWERISE®

Please submit any project requests to industrial.powerise@stabilus.com.

Customer / Project Information

Company Name		**Company Website / Social Media**	
Company Address		**Project Name**	
Project Lead Name		**Project Lead Title**	
Project Lead Email		**Project Lead Phone Number**	

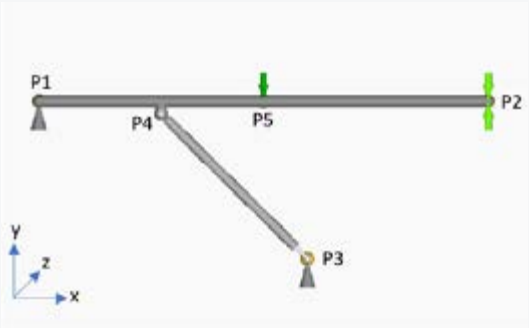
Application Description (Vehicle Name/Model Number, Machine Type, etc.)				
Development phase	Proof of Concept ☐	New Design ☐	Series changeover ☐	Redesign ☐
	Other *(Please Describe)* ☐			
Prototyping Schedule	Project Prototype Delivery Date		Quantity of prototype parts	
Production Schedule	Production Release Date	Annual Quantities	Target price per unit / system	
Legal / Certification Requirements / Norms				
Electromagnetic Compatibility requirements (EMC)				

Application Information

Functional description of the overall system			
Existing version	Manual ☐		Pneumatics ☐
	Gas spring ☐		Hydraulics ☐
	Electric ☐		Other *(please describe):*
Supply voltage	12V ☐	24V ☐	*Note:* *Stabilus can supply a power supply (24V) for Stabilus ECU.*
Control System responsibility	Stabilus ☐	Customer ☐	
Functional requirements of control System			
Manual motion required? Yes ☐ No ☐		**Desired force to operate manually** _____ kg ☐ N ☐	
Required opening / closing time _____ sec.		**Cycle time** _____ sec.	
Lifetime / Number of cycles _____			
Operation temperature _____ °C ☐ °F ☐		**Storage temperature (if necessary)** _____ °C ☐ °F ☐	
Required protection (IP code, etc.)			

Application Information

Geometry
Kinematics (data shown in closed position)
Example: Flap with 90° opening angle (closed position)



Points can be transferred to multiple other applications

Type of Application / Category

Positioning	☐	*high holding forces in extension and compression direction necessary*
Horizontal adjustment	☐	*low holding forces necessary*
Vertical adjustment	☐	*high holding force in compression direction necessary*

Point	Description	Coordinate / Value		
P1	Pivot point	x:	y:	z:
P2	Handle point	x:	y:	z:
P3	Fixation point frame	x:	y:	z:
P4	Fixation point flap	x:	y:	z:
P5	COG	x:	y:	z:
	Opening angle [°]			

Application weight
_____ kg ☐

Unit, please specify:
_____

Additional weights
_____ kg ☐

Unit, please specify:
_____

Use of gas spring as force support possible?
Yes ☐ No ☐

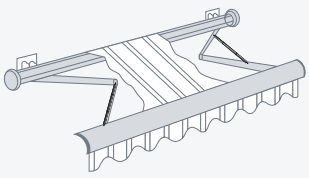
Use of ball sockets as end-fittings possible?
Yes ☐ No ☐

2D drawings / mounting data available?
Yes ☐ No ☐

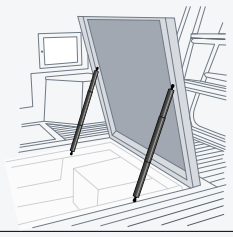
3D CAD models / mounting data available?
Yes ☐ No ☐

Illustrations of possible applications and market segments

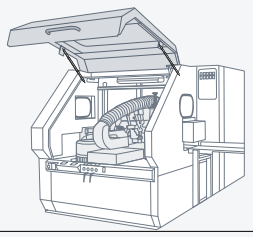
Home-Automation



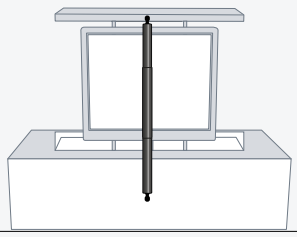
Caravan, Marine, Special Vehicles



Mechanical engineering



Furniture



INDUSTRIAL POWERISE®
YOUR APPLICATION – YOUR DRIVE

VERTICAL LIFT
TAILGATES AND HOODS

Perfect for tailgates, hoods, and linear adjustments in a vertical direction:

- **Various spindle pitches for a multitude of applications**
- **A combination with gas springs relieves strain on the drive and allows:**
  - Higher weights
  - Ergonomic manual movement
  - Higher travel speeds
- **Optimal design for mechanical friction brakes for these applications:**
  - Only effective in the direction of movement
  - Keep the application open after the end of movement

HORIZONTAL SLIDE
DOORS & GATES

Only slight braking effect in both directions, for example to be able to move doors and gates smoothly by hand:

- **High travel speed**
- **Easy manual adjustment setting**
- **Simple and continuous positioning**

YOUR MOTION. OUR SOLUTION.

STABILUS

THE GLOBAL MOTION CONTROL SOLUTION PROVIDER TO THE INDUSTRY

- Specialized industrial brands with unique solutions and expertise for each market.
- Wide product range – from simple to complex requirements across all industries.
- Broad global presence that closely connects us with all markets.

Stabilus group of industrial brands

STABILUS

Globally leading series gas spring manufacturer meeting highest automotive quality standards for industrial products in all plants.

ACE
A STABILUS COMPANY

Expert in **industrial damping** and deceleration with **excellent customer support** satisfying most demanding application requirements.

CULTRARO
A STABILUS COMPANY

Global specialists in the **design and manufacture of dampers in compact sizes with high torques** and forces, offering rotary, axial and linear solutions for every damping need.

DESTACO
A STABILUS COMPANY

A global leader in the design and manufacture of **high-performance automation, workholding, and remote handling solutions.**

General Aerospace
A STABILUS COMPANY

Innovative supplier of distinctive **airline motion control solutions.**

HAHN GASFEDERN
A STABILUS COMPANY

Experienced provider of **customized and special** gas springs with **very fast** time to market.

STABILUS

YOUR MOTION. OUR SOLUTION.

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info@stabilus.com
www.stabilus.com

The QR code will take you to our international locations

@stabilus

@stabilusgroup

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