

Product Area

Geared Drives

We don't make the conveyor.

**We make
it smart.**

Catalogue Overview

Intelligent
Performance.



Geared Drives

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Product Overview

PGD-Ai 24V | 48V



Our Geared Motor as pneumatics alternative with M8-4Pin connection.

PGD-Ai WashDown 24V | 48V



Our Geared Motor as pneumatics alternative with M8-4Pin connection and IP66 sealing for damp environments.

PGD-IDC



Our Motor Roller with integrated commutation electronics for applications using third-party controls with 5Pin connection.

PGD-JST 24V | 48V



Our Geared Motor as pneumatics alternative with 9-Pin JST connection.

PGD-Ai

24V | 48V



Combine high torque and efficiency in a small package.

The PGD-Ai 24V | 48V is our standard versatile gear motor which is able to replace traditional pneumatics and AC drives. As a relatively small gear motor it is the perfect product for tight spaces. It gives you the opportunity to standardise your controls architecture and bus systems in your complete system, which results in higher efficiency.

Benefits

- **Reliable mechanical design**
- **Versatile in use**
- **Replaces classical pneumatics**
- **Precise positioning**
- **Excellent life expectancy**
- **High overload capacity**
- **High acceleration torque**



Features

- **Brushless 24V DC motor**
- **Double bearing output shaft**
- **External motor controller**
- **M8-4Pin standard connector**
- **Internal data memory**
- **Remote control versatility and diagnostics**



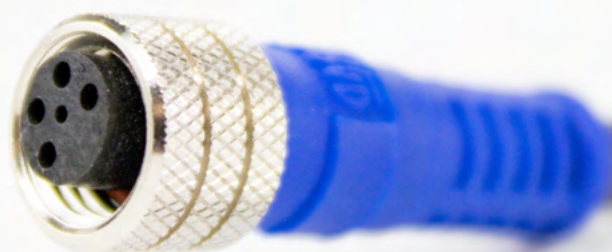
Purchasing of Pulseroller products such as powered rollers, geared motors, transfer units and controls from one source means reduced purchase and design time as well as associated costs. No pneumatics or any secondary communication bus required.

Due to one shop sourcing, the mechanical and electrical design of

conveyors will be less expensive, easier to maintain and more straight forward. Virtually all functionality required in conveyors can be controlled and driven by Pulseroller products. In most cases pneumatic actuators can be completely replaced. Compactness is the key for PGD-Ai which can be applied in many different applications including its use as a servomotor for pop up wheels, or

as a belt drive and lift motor in transfer units. Used in combination with the positioning control of ConveyLinX, it is the perfect solution.

PGD-Ai can't be mounted vertically in order to avoid unexpected product failures. Pulseroller PGD-Ai opens up a new world of cost effective, reliable servo drive applications.



- **Voltage:** 24V DC
- **Nominal Output:** 50W
- **Protection Class:** IP54
- **Rated Current:** ECO: 2,5A | BOOST: 3,5A
- **Starting Current:** ECO: 3,0A | BOOST: 5,0A
- **Connection:** M8-4Pin connector, 9-Pin JST connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

Gear Ratio	Gearbox	Max. Speed min-1*		Rated Torque Nm		Acceleration Torque Nm	
		Eco	Boost	Eco	Boost	Eco	Boost
67:1	3-stage	86	62	4,02	7,24	6,63	11,94
45:1		129	93	2,70	4,86	4,46	8,02
33:1		176	127	1,98	3,56	3,27	5,88
27:1		215	156	1,62	2,92	2,67	4,81
18:1		316	229	1,20	2,16	1,98	3,56
15:1	2-stage	387	280	1,00	1,80	1,65	2,97
11:1		527	382	0,73	1,32	1,21	2,18
9:1		644	467	0,60	1,08	0,99	1,78

Gear Ratio	Gearbox	Weight (in kg)
67/45/33/27:1	3-stage	1,5
18/15/11/9:1	2-stage	1,2

[illegible]

General Technical Data

- **Voltage:** 48V DC
- **Nominal Output:** Up to 60W
- **Protection Class:** IP54
- **Rated Current:** 1,7A
- **Adjustable Starting Current Limitation:** 1,7A | 2,0A | 2,5A | 3,5A | 4,0A
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

Basic Characteristics Data PGD-Ai 48V

Gear Ratio	Gearbox	Max. Speed min -1 (Rotational speed [rpm])*	Torque (in Nm)						Output (W)	Current (A)	Current (A)	
			Rated Torque	Acceleration @ Current limit					Holding Torque	Perma- nent	Rated Current	Max. Current
				1,7 A	2,0 A	2,5 A	3,5 A	4,0 A				
11:1	2-stage	637,5	0,90	1,12	1,20	1,40	1,80	1,99	1,86	60W	1,7A	4,0A
15:1		466,7	1,23	1,53	1,64	1,91	2,45	2,71	2,54			
18:1		382,5	1,51	1,86	2,00	2,33	2,99	3,30	3,10			
33:1	3-stage	212,5	2,37	3,36	3,60	4,19	5,40	5,96	5,82	52W		
45:1		155,6	3,23	4,58	4,91	5,72	7,36	8,12	7,94			

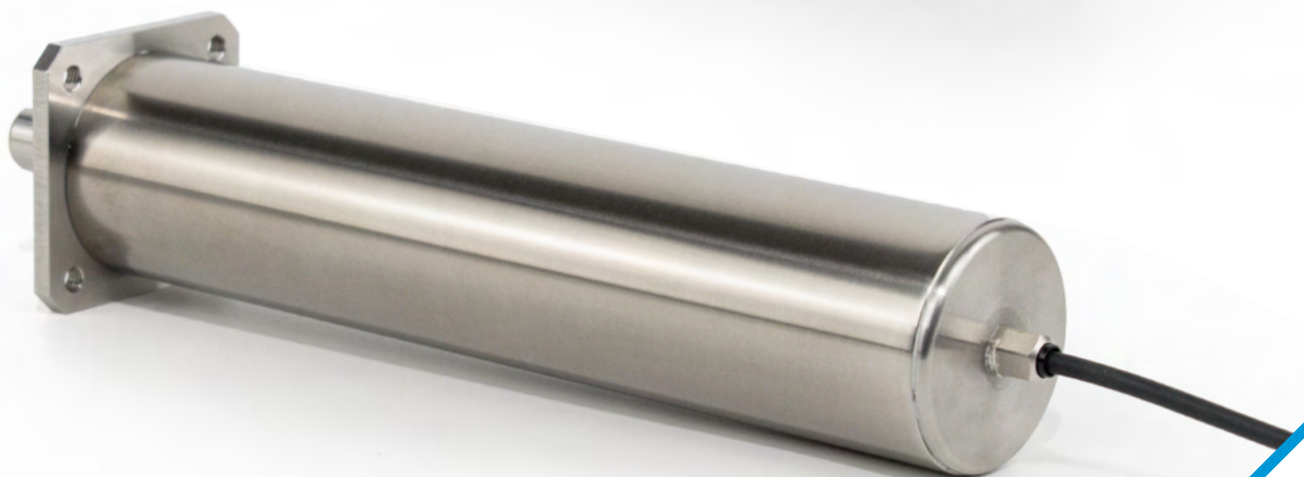
* The speed can be reduced to 10% with our controls. Recommended working range 100% to 50%.

Advanced Characteristics Data PGD-Ai 48V

Gearbox	Gear Ratio	Output (W) @ 20°C	Derating (%/K)	Overload
2-stage	11:1	60W	-0,66%	218%
	15:1			
	18:1			
3-stage	33:1	52W	-0,84%	252%
	45:1			

PGD-Ai WashDown

24V | 48V



High torque, efficiency and IP66 sealing combined for all conditions.

The WashDown version of the tried-and-tested PGD-Ai geared motor has been specifically developed for use in damp environments.

It is characterised by a special housing that guarantees optimum protection. Both the sealing system and the housing have been subjected to intensive testing in accordance with IP66 standards to ensure maximum resistance.

Thanks to the integration of Ai technology, the PGD offers versatility as a servomotor for a wide range of applications. The use of the same control systems as the motorised rollers ensures seamless and optimally coordinated control continuity within systems.

Benefits

- Reliable mechanical design
- Versatile in use
- Replaces classical pneumatics
- Precise positioning
- Excellent life expectancy
- High overload capacity
- High acceleration torque

Features

- IP66 sealing
- Brushless 24V DC motor
- Double bearing output shaft
- External motor controller
- M8-4Pin standard connector
- Internal data memory
- Remote control versatility and diagnostics



M8-4Pin connector

General Technical Data

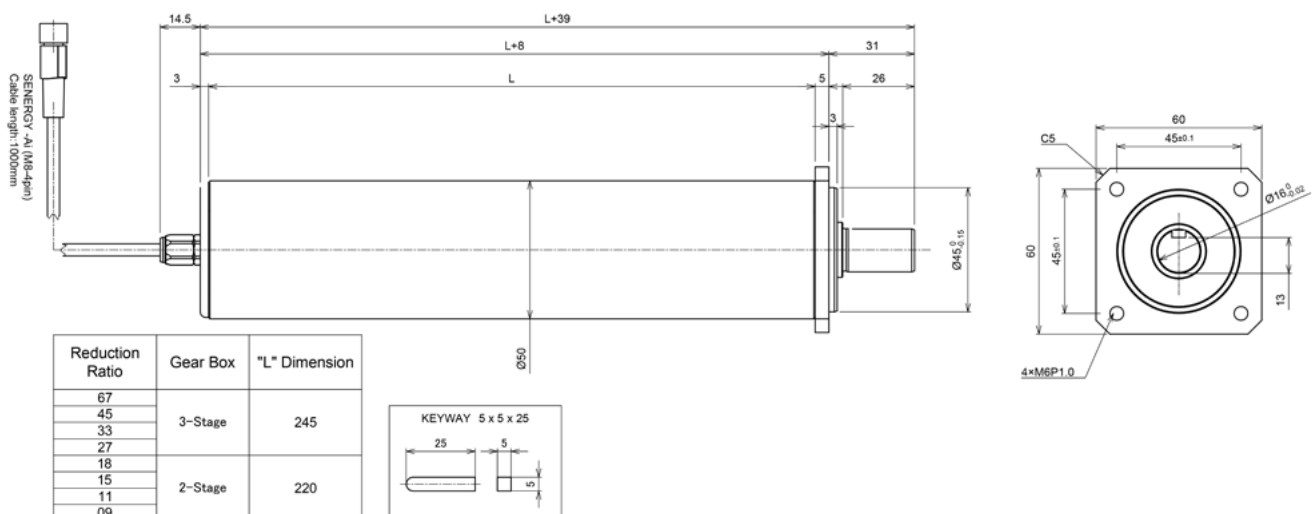
- **Voltage:** 24V DC
- **Nominal Output:** 50W
- **Protection Class:** IP66
- **Rated Current:** ECO: 2,5A | BOOST: 3,5A
- **Starting Current:** ECO: 3,0A | BOOST: 5,0A
- **Connection:** M8-4Pin connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

Characteristics Data PGD-Ai 24V WashDown in Eco-Mode and Boost-Mode

Gear Ratio	Gearbox	Max. Speed min-1*		Rated Torque Nm		Acceleration Torque Nm	
		Eco	Boost	Eco	Boost	Eco	Boost
67:1	3-stage	86	62	4,02	7,24	6,63	11,94
45:1		129	93	2,70	4,86	4,46	8,02
33:1		176	127	1,98	3,56	3,27	5,88
27:1		215	156	1,62	2,92	2,67	4,81
18:1	2-stage	316	229	1,20	2,16	1,98	3,56
15:1		387	280	1,00	1,80	1,65	2,97
11:1		527	382	0,73	1,32	1,21	2,18
9:1		644	467	0,60	1,08	0,99	1,78

* The speed can be reduced to 10% with our controls. Recommended working range 100% to 50%.

Dimensions of PGD-Ai 24V | 48V WashDown



General Technical Data

- **Voltage:** 48V DC
- **Nominal Output:** Up to 60W
- **Protection Class:** IP66
- **Rated Current:** 1,7A
- **Adjustable Starting Current Limitation:** 1,7A | 2,0A | 2,5A | 3,5A | 4,0A
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

Basic Characteristics Data PGD-Ai 48V WashDown

Gear Ratio	Gearbox	Max. Speed min -1 (Rotational speed [rpm])*	Torque (in Nm)							Output (W)	Current (A)	Current (A)
			Rated Torque	Acceleration @ Current limit					Holding Torque			
				1,7 A	2,0 A	2,5 A	3,5 A	4,0 A		Perma- nent	Rated Current	Max. Current
11:1	2-stage	637,5	0,90	1,12	1,20	1,40	1,80	1,99	1,86	60W	1,7A	4,0A
15:1		466,7	1,23	1,53	1,64	1,91	2,45	2,71	2,54			
18:1		382,5	1,51	1,86	2,00	2,33	2,99	3,30	3,10			
33:1	3-stage	212,5	2,37	3,36	3,60	4,19	5,40	5,96	5,82	52W		
45:1		155,6	3,23	4,58	4,91	5,72	7,36	8,12	7,94			

* The speed can be reduced to 10% with our controls. Recommended working range 100% to 50%.

Advanced Characteristics Data PGD-Ai 48V

Gearbox	Gear Ratio	Output (W) @ 20°C	Derating (%/K)	Overload
2-stage	11:1	60W	-0,66%	218%
	15:1			
	18:1			
3-stage	33:1	52W	-0,84%	252%
	45:1			

Weight of PGD-Ai 24V | 48V WashDown

Gear Ratio	Gearbox	Weight (in kg)
67/45/33/27:1	3-stage	2,5
18/15/11/9:1	2-stage	2,2

PGD IDC



Combine high torque and efficiency with the 3rd party control of your choice.

The PGD-IDC is our standard versatile gear motor which is able to replace traditional pneumatics and AC drives. As a relatively small gear motor it is the perfect product for tight spaces. With its 5 Pin connector you are able to connect and run it with the 3rd party control of your choice!

Benefits

- **Reliable mechanical design**
- **Versatile in use**
- **Replaces classical pneumatics**
- **Precise positioning**
- **Excellent life expectancy**
- **High overload capacity**
- **High acceleration torque**

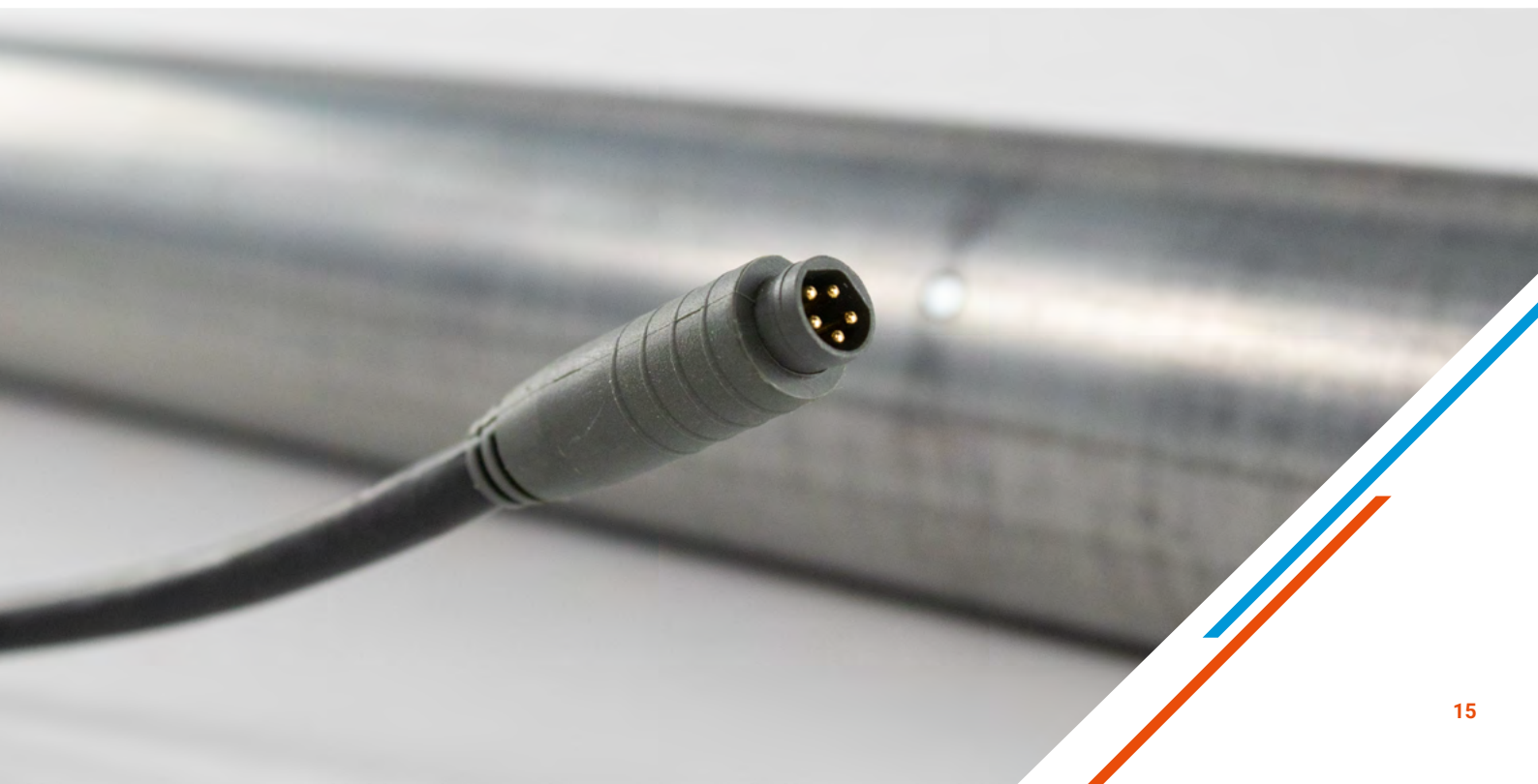


Features

- **Brushless 24V DC motor**
- **Double bearing output shaft**
- **5Pin connector**
- **Select between 2- or 3-stage gearbox**

The IDC principle makes it possible to connect this robust and reliable geared motor to third-party control systems as well as to control systems developed

in-house. This results in a compact and extremely reliable drive solution that has been specially developed for this area of application.



General Technical Data

- **Voltage:** 24V DC
- **Nominal Output:** Up to 38W
- **Protection Class:** IP54
- **Rated Current:** 2,4A
- **Starting Current:** 3,0A
- **Connection:** 5Pin connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

Basic Characteristics Data PGD-IDC

Gear Ratio	Gearbox	Max. Speed min-1*	Rated Torque (Nm) @20°C	Acceleration Torque (Nm)	Starting Torque (Nm)
11:1	2-stage	528	0,69	1,10	2,5
15:1		386	0,94	1,5	3,4
18:1		316	1,15	1,84	4,2
33:1	3-stage	176	1,86	3,03	7,5
45:1		128	2,53	4,15	10,3

* Speed regulation according to selected input voltage.

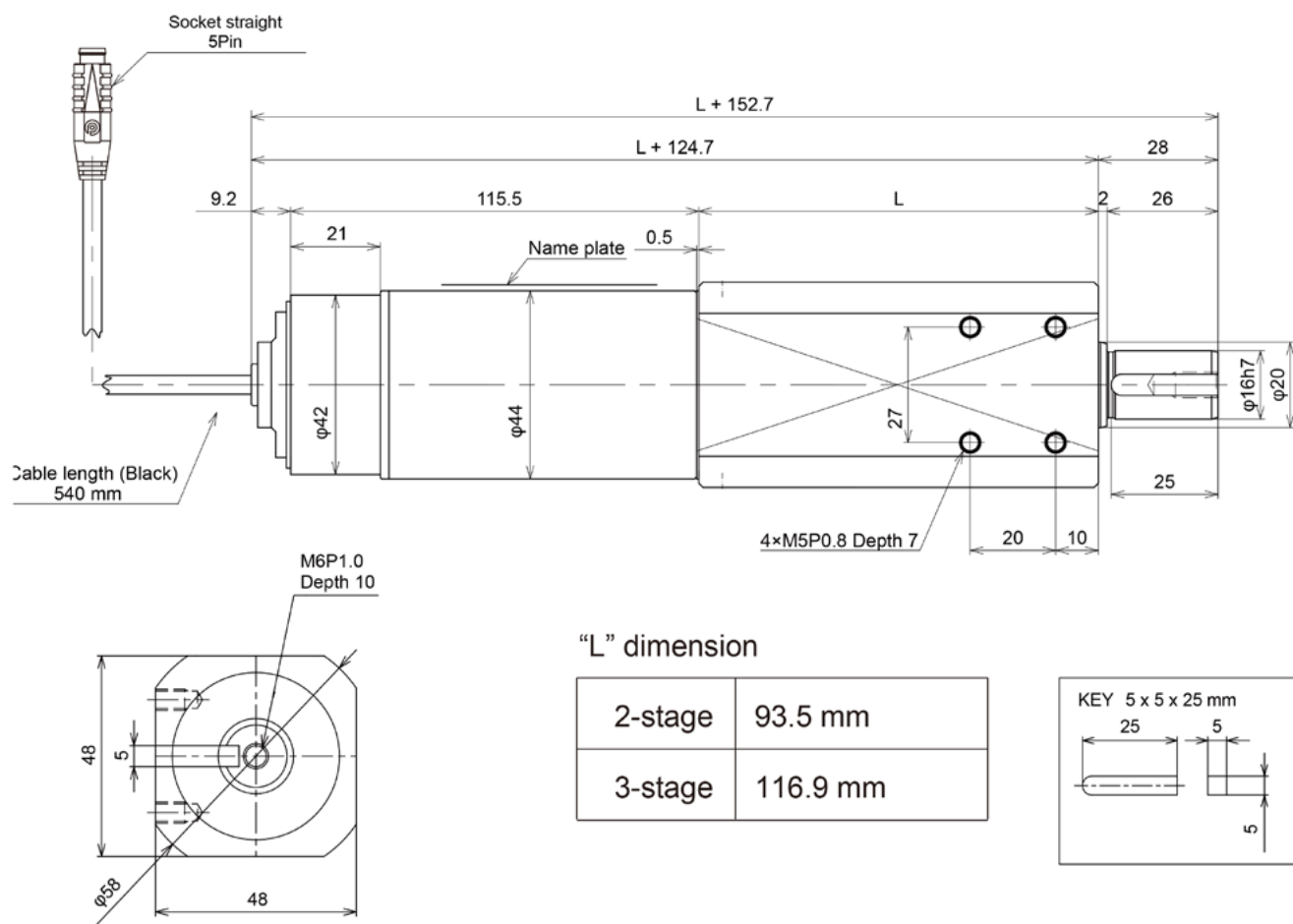
Advanced Characteristics Data PGD-IDC

Gearbox	Mech. Output (W) @ 20°C	Derating (%/K)	Overload
2-stage	38W	-1,1%	163%
3-stage	34W	-1,2%	146%

Weight of PGD-IDC

Gear Ratio	Gearbox	Weight (in kg)
45/33:1	3-stage	1,6
18/15/11:1	2-stage	1,4

Dimensions of PGD-IDC



PGD-JST

24V



Combine high torque and efficiency in a small package.

The PGD-JST and PGD-JST-B 24V is our standard versatile gear motor, with 9Pin JST connector, which is able to replace traditional pneumatics and AC drives. As a relatively small gear motor it is the perfect product for tight spaces. It gives you the opportunity to standardise your controls architecture and bus systems in your complete system, which results in higher efficiency.

Benefits

- **Reliable mechanical design**
- **Versatile in use**
- **Replaces classical pneumatics**
- **Precise positioning**
- **Excellent life expectancy**
- **High overload capacity**
- **High acceleration torque**



Features

- **Brushless 24V DC motor**
- **Double bearing output shaft**
- **External motor controller**
- **9-Pin JST standard connector**
- **Internal data memory**
- **Remote control versatility and diagnostics**



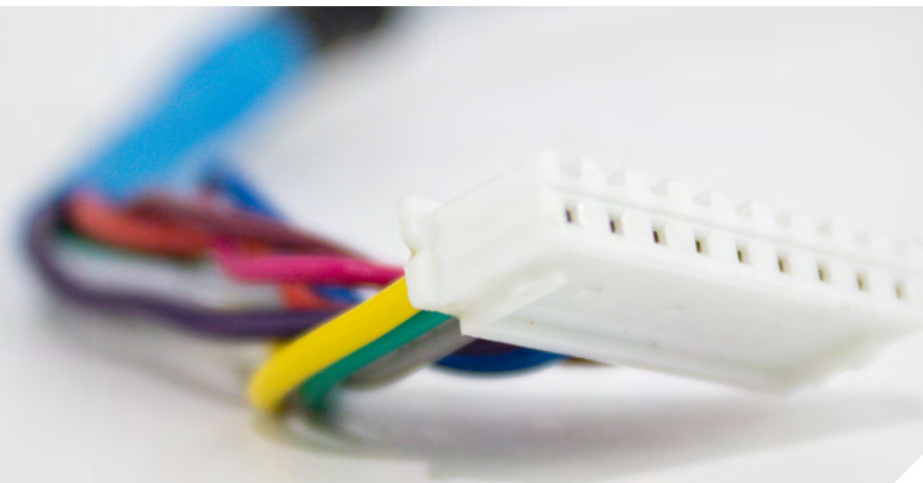
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pop up wheels, or as a belt drive and lift motor in transfer units. Used in combination with the positioning control of ConveyLinX, it is the perfect solution. PGD-JST and PGD-JST-B can't be mounted vertically in order to avoid unexpected product failures.

Pulseroller PGD-JST and PGD-JST-B opens up a new world of cost effective, reliable servo drive applications.



General Technical Data

- **Voltage:** 24V DC
- **Nominal Output:** 50W
- **Protection Class:** IP54
- **Rated Current:** ECO: 2,5A | BOOST: 3,5A
- **Starting Current:** ECO: 3,0A | BOOST: 5,0A
- **Connection:** M8-4Pin connector, 9-Pin JST connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

Characteristics Data PGD-Ai and PGD-JST 24V in Eco-Mode and Boost-Mode

Gear Ratio	Gearbox	Max. Speed min-1*		Rated Torque Nm		Acceleration Torque Nm	
		Eco	Boost	Eco	Boost	Eco	Boost
67:1	3-stage	86	62	4,02	7,24	6,63	11,94
45:1		129	93	2,70	4,86	4,46	8,02
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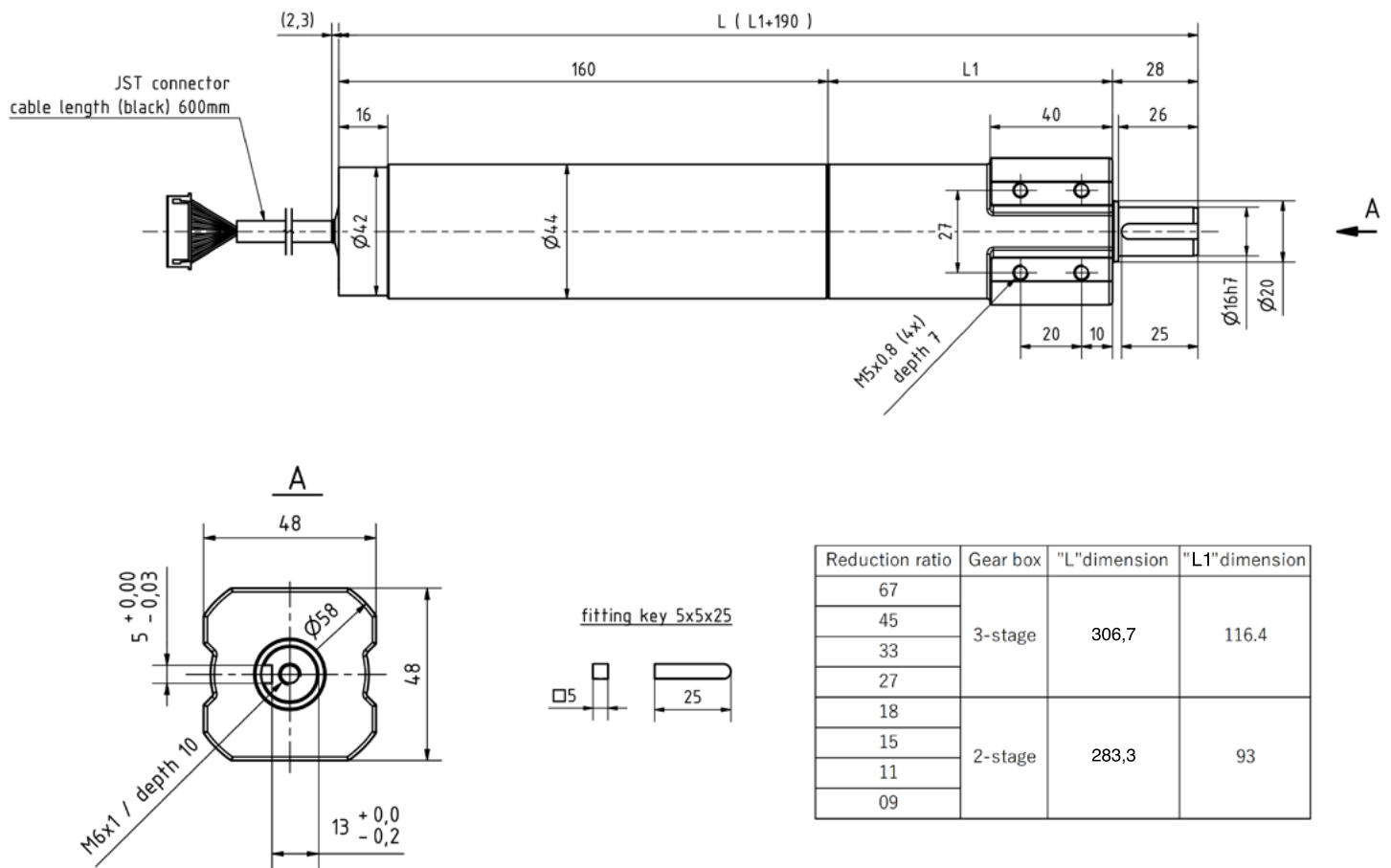
Weight of PGD-JST 24V

Gear Ratio	Gearbox	Weight (in kg)
67/45/33/27:1	3-stage	1,5
18/15/11/9:1	2-stage	1,2

Weight of PGD-JST-B 24V

Gear Ratio	Gearbox	Weight (in kg)
67/45/33/27:1	3-stage	2,0
18/15/11/9:1	2-stage	1,7

Dimensions of PGD-JST-B 24V





Learn more
about us!



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