stepper motor versions with connectors | 23

Stepper motors with connections via circular connectors series SM ...X and SM ...Y

STÖGRA motors SM 56, SM 87, SM 88 and SM 107 are available optionally with connections via robust industry conform circular connectors type M23.

The standard options »encoder« and »brake« are available for both connector versions.

Available are standard versions with angled connectors series SM ...X... and with straight connectors series SM ...Y... (the connector for the brake connection ist always straight).









SM 56.3.18JX4,6B E50 with angled connectors series SM ...X...

SM 56.2.18JY3 with straight connector series SM ... Y ...

SM 87.2.18MX6 with angled connector series SM ...X...

SM 87.2.18MY6 E50 with straight connectors series SM ... Y ...

All connectors mounted at the motor include male contacts. The necessary counter connectors include female contacts.

Connector housings for the connections motor phases and encoder are metalic (zinc diecasting with nickled surface). Protection class of the connectors is IP67. The counter connectors are EMC-justed and a cable shield may be mounted. The connector for the brake is made of PVC, protection class also is IP67.

Ordering examples (see also ordering key at page 4):

SM 56.2.18JX3 E50 (with angled connectors and encoder E50)

SM 87.2.18MX6B (with angled connectors and brake)

SM 87.1.18MY3 H200 (with straight connectors and encoder H200)

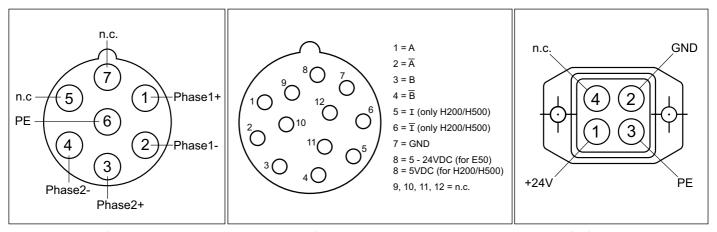
The counter connectors are not included in the deliveries. Counter connectors have to be ordered seperately.

ordering no.	connector angled	connector straight	motor- phases	encoder E50 / H200 / H500	brake	crimp- connection	soldering- connection	cable ∅ mm
GS X	Х		Х			Х		7 – 12 mm
GS XL	Х		Х				Х	7 – 12 mm
GS Y		X	Х			Х		7 – 12 mm
GS YL		Х	Х				Х	7 – 12 mm
GS X E	Х			X		Х		5 – 10 mm
GS XL E	Х			X			Х	5 – 10 mm
GS Y E		Х		X		Х		5 – 10 mm
GS YL E		X		X			Х	5 – 10 mm
GS X B	Х				Х		Х	5 – 10 mm

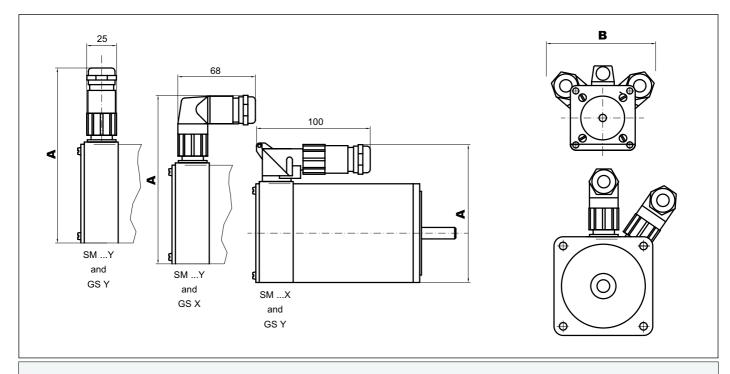
The counter connectors for connections motor phases and encoder each include a mounting set with connector housing, connectors pin socket and connector pins (female pins).

24 | Stepper motors versions with connectors

Stepper motors with connections via circular connectors series SM ...X and SM ...Y



connector motor phases connector encoder connector brake



dimensions A								
	SMY and counter connector straight	SMY and counter connector angled	SMX and counter connector straight					
SM 56	119	112	90					
SM 87	152	145	123					
SM 88	152	145	123					
SM 107	176	167	145					

Dimension A includes the dimensions connector and counter connector, but not connected cable. Dimension B depends on motor type and the options (with / without brake, encoder).

stepper motor versions with connectors | 25

Stepper motors with connector according to Mil-C-5015 series SM ... Z257



STÖGRA stepper motors are available optionally with connectors according to the standard Mil-C-5015, which are widely used in the industry.

Connector mounted at the motor for connections motor phases (phases and PE):

MS3102R size 14s, 5 pole, male connector type (MS3102R14s-5P)

Suitable female connectors are e.g. types MS3101, MS3106, MS3108 each size 14s and 5 poles, female connector type Example: MS3106R14s-5S

For option brake:

Mounted connector at the motor for an integrated brake: MS3102R size 10s, 2 poles, male connector type (MS3102R10s-4P). Suitable female connectors are e.g. types MS3101, MS3106, MS3108 each size 10s und 2-poles, female connector type Example: MS3106R10s-4S

The female counter connectors are not included in the delivery.

The motors need to be ordered with the type key extension »Z257«.

Ordering example: motor SM 88.2.18M8B Z257

Stepper motors series SM 56 with 9-pole D-Sub connector



SM 56...Z154 with D-Sub connector

SM 56...E50 with D-Sub connector Z159 SM 56... with D-Sub connector Z182

For series SM 56 special versions with connections for motor, encoder and brake via 9-pole D-Sub connectors are available. There are three different versions available, which are shown in above pictures.

For all versions the options »brake« and »encoder E50« are possible.

For the version without encoder and without brake the motor includes a D-Sub-connector (male type) for the motor connections (phases + PE). Options »encoder E50« and »brake« additionally include one D-Sub-connector (female type) for each option.

All D-Sub connectors are standard 9-pole D-Sub connectors.

At the Z182-version the maximum bipolar phase current may not exceed 4,2A (SM 56.1.18J3,9 and SM 56.3.18J4,6 are not available with a D-Sub connector version Z182 - for possible special versions with special D-Sub connectors please contact us).

At motor stand still a phase current reduction to 50% of the running current should be activated in the motor control.

Ordering example: SM 56.1.18J3 Z154, SM 56.2.18J2B E50 Z159, SM 56.3.18J1,5 E50 Z182