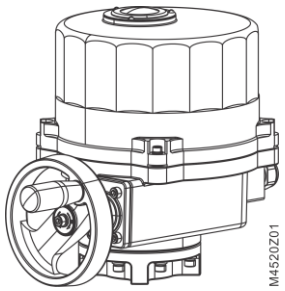
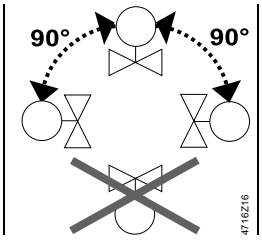
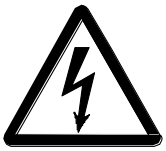
zh-cn 安装调试指导 **执行器**

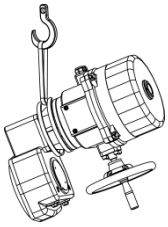
en Mounting and calibrating instructions **Actuators**



SQL321B..
SQL361B..
SQL351B..



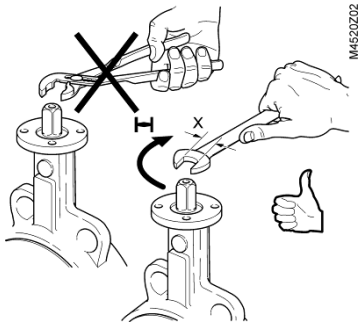




SQL...B2650//SQL...B6000

1

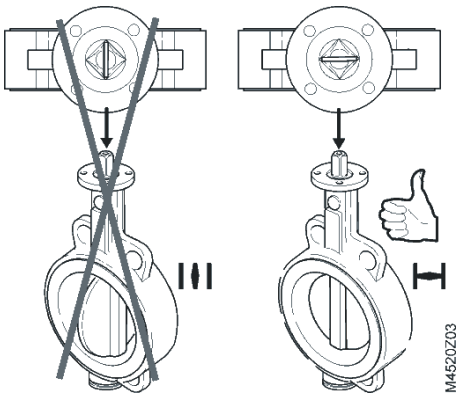
VKF42../VFF41..



DN	X [mm]	DN	X [mm]
40…100	☐ 11	350…400	☐ 27
125…200	☐ 17	450…500	☐ 36
250…300	☐ 22	600…700	☐ 46
		800…900	☐ 60

2

VKF42../VFF41..



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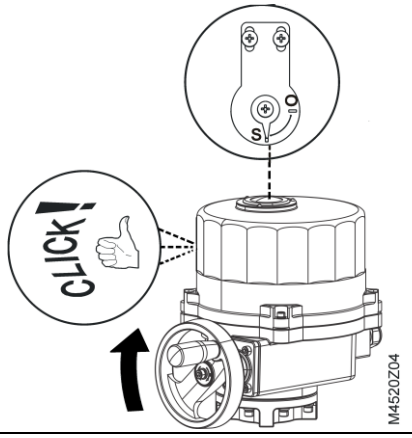

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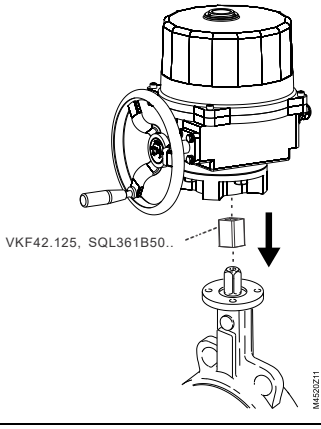

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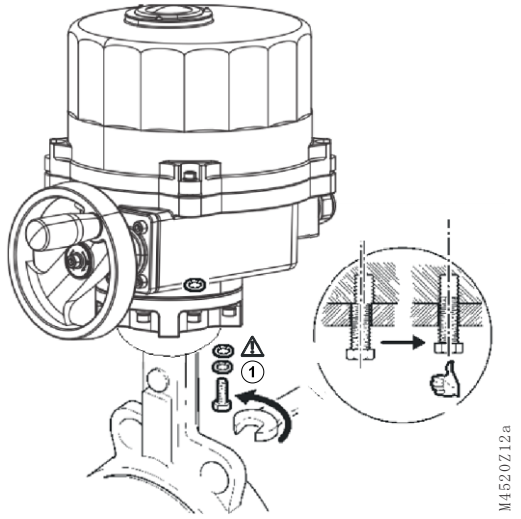
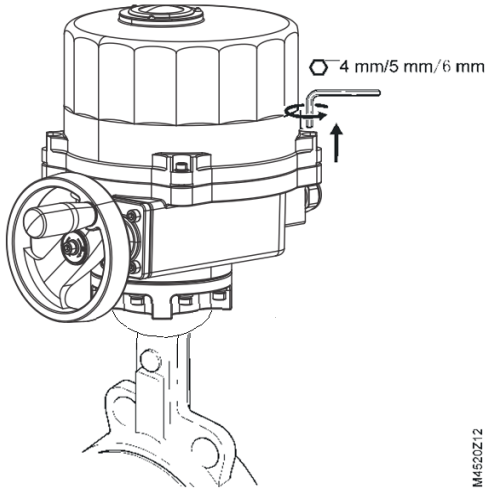


1	en	•Always use lock washers and tighten the bolts. •Loose bolts may cause the position feedback unit to fail even when the actuator is correctly in place.
	zh-cn	•务必使用锁紧垫片并拧紧螺栓。 •螺栓松动可能导致执行器运行到位时位置反馈装置失效。

6



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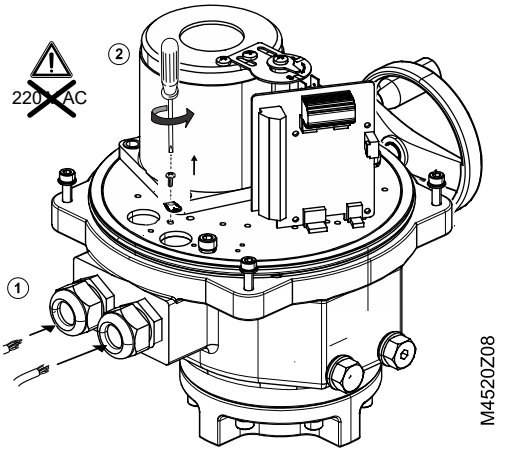
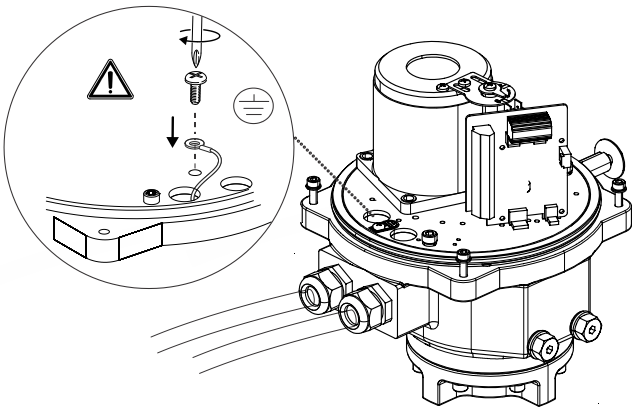


1	en	Separate power cables from signal cables
	zh-cn	分开连接电源线和信号线

8



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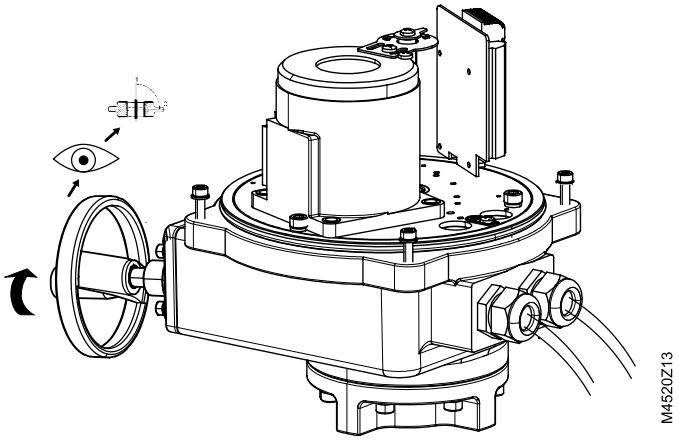

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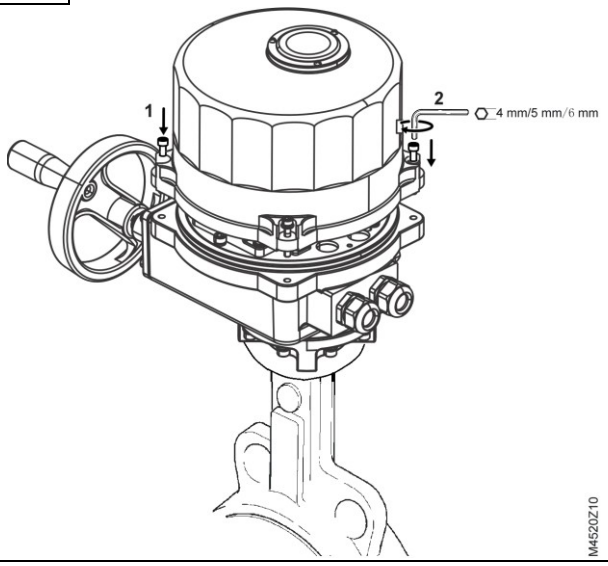
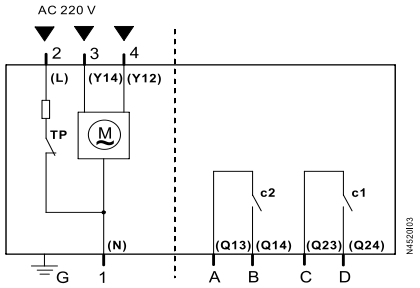
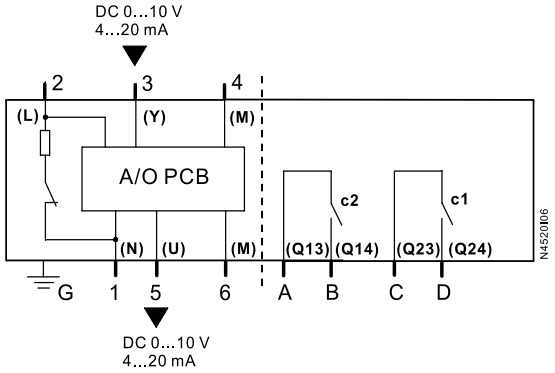


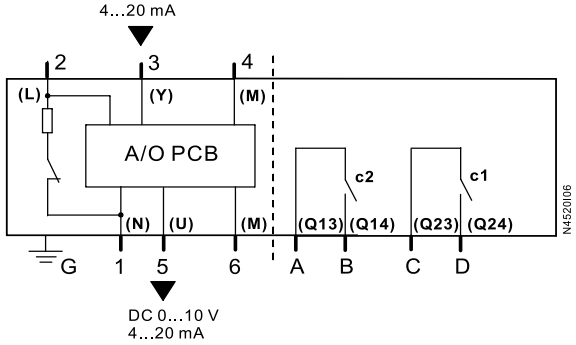
SQL321..



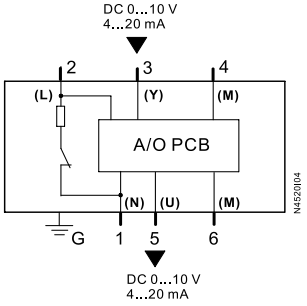
SQL361B25
SQL361B50



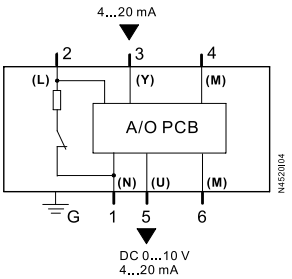
SQL351B25
SQL351B50



SQL361B150…
B6000

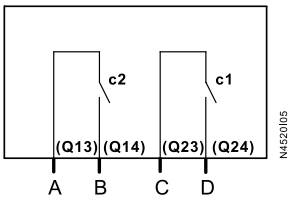


SQL351B150…
B6000



en	Accessory	zh-cn	附件

ASC10.21



	c1 ASC10.21	c2 ASC10.21	Y	U	M	Y12	Y14	L	N
zh-cn	辅助开关 闭合	辅助开关 开启	控制信号(SQL361) DC 0...10 V, 4…20 mA (SQL351) 4…20 mA	位置反馈 DC 0...10 V 4…20 mA	测量中线	控制信号 关 (S)	控制信号 开 (O)	工作电压 AC 220V	系统零线
en	Auxiliary switch CLOSED	Auxiliary switch OPEN	Positioning signal (SQL361) DC 0...10 V, 4…20 mA (SQL351) 4…20 mA	Position feedback DC 0…10 V 4…20 mA	Measuring neutral	Control signal CLOSED (S)	Control signal OPEN (O)	System potential AC 220 V	Neutral

Calibration Actuator / 执行器校准

SQL351B25..50
SQL361B25..50

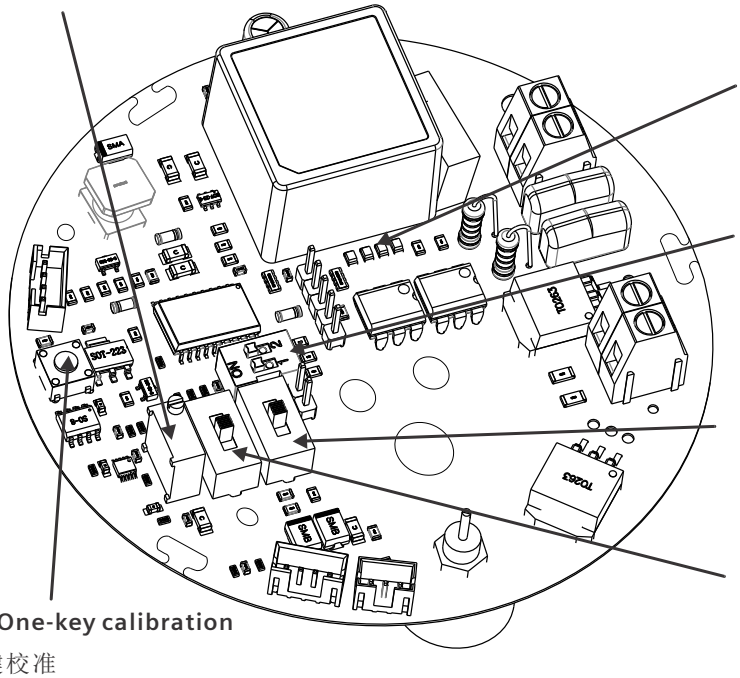
Signal type Selection 0..10V and 4..20 mA signal / 信号类型选择 0..10V 和 4..20 mA

en	• Factory setting for input and output signal in SQL361B.. is 0..10 V. • Factory setting for input and output signal in SQL351B.. is 4..20 mA. *Fail-in position not available at input signal 0..10 V. • Select switch as below description.
zh-cn	• SQL361B..输入和输出信号的出厂设置..是 0..10 V • SQL351B..输入和输出信号的出厂设置..是 4..20 mA *在输入信号为 0..10 V 时，无断信号保位功能 • 请按照以下说明选择拨码开关位置。

en			**zh-cn**		
Signal	Output signal	Input signal	信号	输出信号	输入信号
	S3	S2		S3	S2
0-10 V			0-10 V		
2-10 V			2-10 V		
4-20 mA			4-20 mA		

W1, 20 mA calibration potentiometer

/ 20 mA 校准电位计



From left to right are D4/D10/D7/D6

/ 从左到右为D4/D10/D7/D6

S4, Signal loss mode settings.

/ 信号丢失模式设置

S2, Selection of Input Signal Types.

/ 选择输入信号类型

S3, Selection of Feedback Signal Types.

/ 选择反馈信号类型

S1, One-key calibration

/一键校准

Signal loss mode settings/信号丢失模式设置

en	Under the condition of Y signals not connected, the action mode of the actuator can be selected by the 1 and 2 bits of the S4 dial code switch.
zh-cn	在 Y 信号未接通的情况下，可通过 S4 拨码开关的 1、2 位选择执行器的动作模式。

en	State / Position	Run to 0 % (default)	Hold position	Hold position	Run to 100 %
	DIP 1	OFF	ON	OFF	ON
	DIP 2	OFF	OFF	ON	ON
zh-cn	状态 / 位置	运行至 0 %（默认）	保持位置	保持位置	运行至 100 %
	DIP 1	关	开	关	开
	DIP 2	关	关	开	开

Calibration/校准

en	In order to determine the disc position fully closed “0 %” or fully open “100 %”, cali-bration is recommended on initial commissioning of modulating type actuator.
zh-cn	为确定阀板位置处于完全关闭“0 %”状态或完全打开“100 %”状态，建议在模拟量控制执行器初次调试时进行校准。

Calibration	LED on PCB		Actuator Movement
1. Supply power to terminal 1 and 2.		Flash	Actuator moves to the position as indicated by control signal. (D4 flash)
2. Press button S1 for 3 seconds		Lit	Actuator moves to “100 %” position (valve open). (D4 light)
		Flash once	Actuator stops at “100 %” position (valve open), indicate light flashes (D6), and then the actuator is ready to move towards “0 %”position (valve closed).
		Flash once	Actuator moves to “0 %” position (valve closed). (D7 flash once)
		Flash	Actuator stops at “0 %” position (valve closed). The indicate light flashes (D4), and then the calibration finished.
3. Calibration finished.		Flash	Actuator moves to the position as indicated by control signal. (D4 flash)

Note: When doing the Calibration procedure, the position of the cam calibration shall be already done (refer to cam adjustment).

校准	PCB 上的 LED 灯		执行器动作
1.接通电源.		闪烁	执行器转动，控制信号指示 LED (D4) 闪烁
2. 按住 S1 保持 3 秒		长亮	执行器转动到 100 % 位置 (阀门开). (D4 亮)
		闪一次	执行器在 100 %的位置停止（阀门开），指示灯（D6）闪烁。然后执行器准备向 0 %的方向转动（阀门关）
		闪一次	执行器转动到 0 %位置（阀门关）(D7 闪一次)
		闪烁	执行器在 0 %位置停止（阀门关），指示灯（D4）闪烁。
3. 校准完成		闪烁	执行器转动到位，控制信号指示灯闪（D4 闪烁）

在凸轮校准完成后，再做执行器校准。

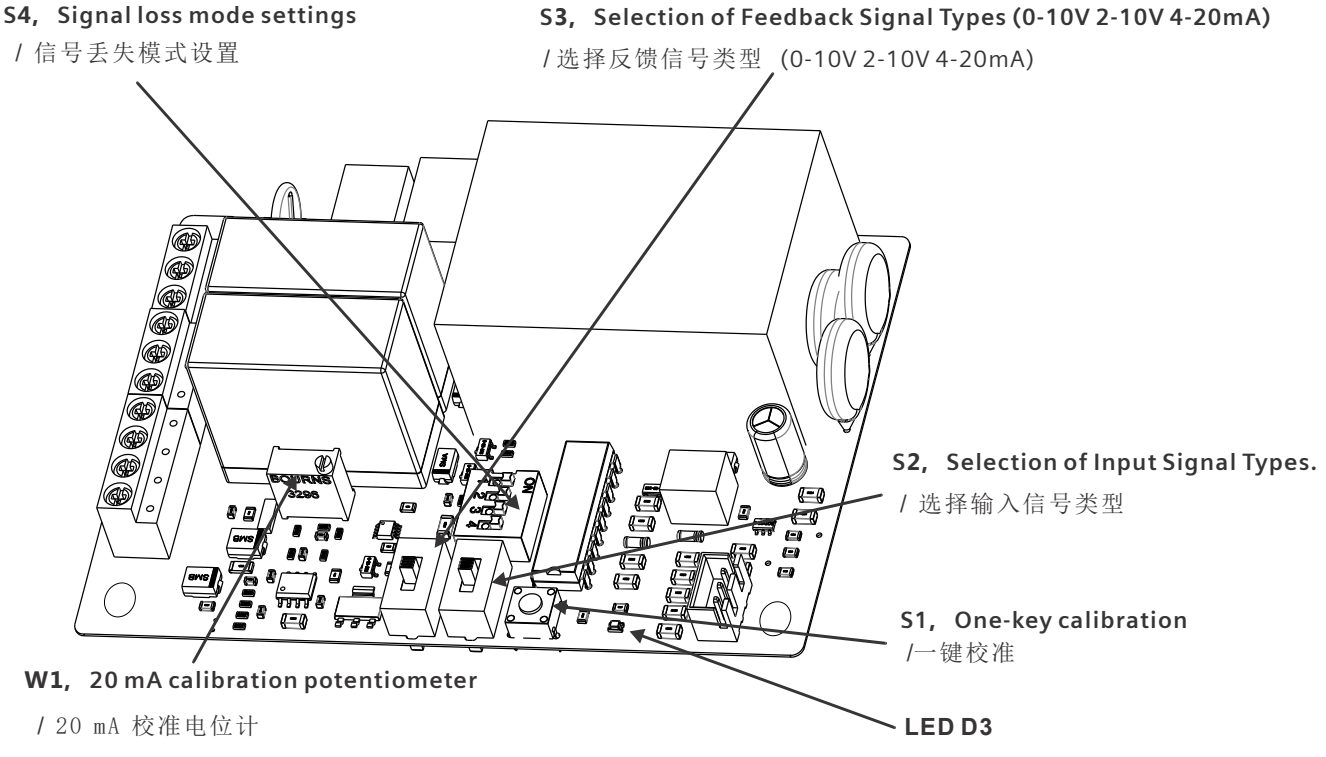
Calibration Actuator / 执行器校准

SQL351B150..6000
SQL361B150..6000

Signal type Selection 0..10V and 4..20 mA signal / 信号类型选择 0..10V 和 4..20 mA

en	• Factory setting for input and output signal in SQL361B.. is 0..10 V. • Factory setting for input and output signal in SQL351B.. is 4..20 mA. *Fail-in position not available at input signal 0..10 V. • Select switch as below description.
zh-cn	• SQL361B..输入和输出信号的出厂设置..是 0..10 V • SQL351B..输入和输出信号的出厂设置..是 4..20 mA *在输入信号为 0..10 V 时，无断信号保位功能 • 请按照以下说明选择拨码开关位置。

en			**zh-cn**		
Signal	Output signal	Input signal	信号	输出信号	输入信号
	S3	S2		S3	S2
0-10 V			0-10 V		
2-10 V			2-10 V		
4-20 mA			4-20 mA		



Signal loss mode settings/信号丢失模式设置

	State / Position	Run to 0 % (default)	Hold position	Hold position	Run to 100 %
en	DIP 1	OFF	ON	OFF	ON
	DIP 2	OFF	OFF	ON	ON
	DIP 3	Reserve			
	DIP 4	Reserve			
zh-cn	状态 / 位置	运行至 0 %（默认）	保持位置	保持位置	运行至 100 %
	DIP 1	关	开	关	开
	DIP 2	关	关	开	开
	DIP 3	备用			
	DIP 4	备用			

Calibration/校准

Calibration	LED D3		Actuator Movement
1. Supply power to terminal 1 and 2.		Lit	Actuator moves to the position as indicated by control signal.
2. Press button S1 for 3 seconds	○	Dark	Actuator moves to “100 %” position (valve open).
		Flash once	Actuator stops at “100 %” position (valve open), indicate light flashes, and then the actuator is ready to move towards “0 %”position (valve closed).
	○	Dark	Actuator moves to “0 %” position (valve closed).
		Flash	Actuator stops at “0 %” position (valve closed).The indicate light flashes, and then the calibration finished.
3. Calibration finished.		Lit	Actuator moves to the position as indicated by control signal.

校准	LED D3		执行器动作
1.接通电源.		长亮	执行器转动，控制信号指示 LED (D4) 闪烁。
2. 按住 S1 保持 3 秒	○	不亮	执行器转向 100 %位置（阀门开）
		闪一次	执行器在 100 %的位置停止（阀门开），指示灯闪烁。然后执行器准备向 0 %的方向转动（阀门关）
	○	不亮	执行器转动到 0 %位置（阀门关）
		闪烁	执行器在 0 %位置停止（阀门关），指示灯闪烁。
3. 校准完成		长亮	执行器转动到位，控制信号指示灯长亮。

Indication of operating state/运行状态指示情况 SQL361B.., SQL351B..

en	The LED display indicating operating status can be viewed by opening the cover of the electronics module.
zh-cn	打开电子模块的盖子，可以通过 LED 显示看到运行状态情况。

SQL351B25..50
SQL361B25..50

	Function	**LED Indication**				**Remarks, troubleshooting**
		D10		**D4**		
en	Calibration mode	OFF	○	ON		Run calibration, everything ok.[1)]
		ON		Flashing		Calibration error.
	Control mode	OFF	○	Flashing		Automatic operation; everything ok.[1)]
		ON		Flashing		Internal error, troubleshooting [2)]
		OFF	○	OFF	○	No power Troubleshooting, eventually replace actuator
zh-cn	**功能**	**LED 指示灯**				**备注，故障排查**
		D10		**D4**		
	校准模式	不亮	○	亮		运行校准，一切正常 [1)]
		亮		闪烁		校准错误。
	控制模式	不亮	○	闪烁		自动运行；一切正常 [1)]
		亮		闪烁		内部错误， 故障排查 [2)]
		不亮	○	不亮	○	未通电：故障排查，最终更换执行器

en	As a general rule, the LED can assume only the states shown above (continuously red, flashing, or off).
zh-cn	一般来说，LED 只能呈现上述状态（持续红色、闪烁或关闭状态）。

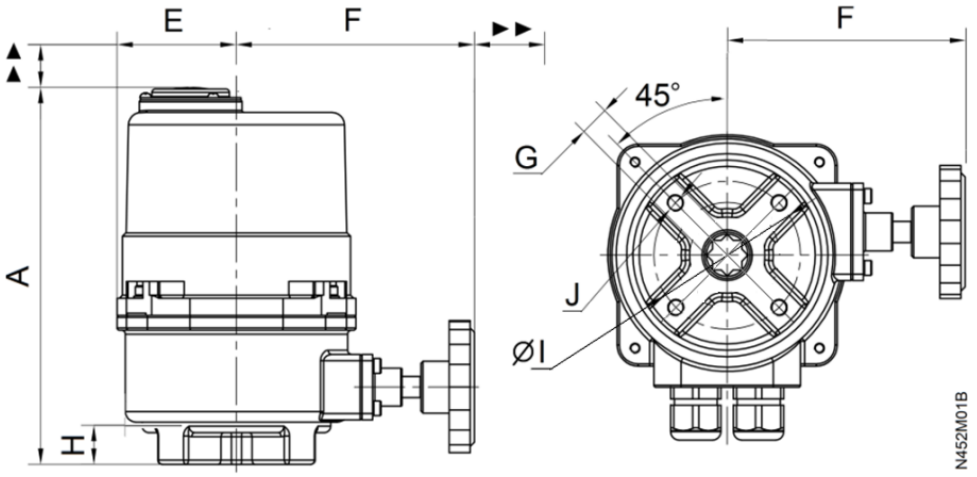
en	1)	The Green LED (D6) with short lit on when reach to “100 %” and the Red LED (D7) with short lit on when reach to “0 %” stroke position.
	2)	When power supply to actuator but no Y control signal and also calibration not started, LED will be continuously light too.
zh-cn	1)	当到达“100 %”行程位置时，绿色 LED 灯（D6）会短暂亮起，而当到达“0 %”行程位置时，红色 LED 灯（D7）会短暂亮起。
	2)	当向执行器供电但没有 Y 控制信号且校准未开始时，LED 灯也会持续亮起。

	Function	LED Indication	Remarks, troubleshooting
en	Calibration	Off ○	Run calibration, everything ok.
		Flashing ◑	Calibration error
	Control mode	Lit ☀	Automatic operation; everything ok.[1)]
		Flashing ◑	Internal error, troubleshooting
		Off ○	No power: Troubleshooting, eventually replace actuator.
zh-cn	**功能**	**LED 指示灯**	**备注，故障排查**
	校准	不亮 ○	运行校准，一切正常。
		闪烁 ◑	校准错误
	控制模式	点亮 ☀	自动运行；一切正常 [1)]
		闪烁 ◑	内部错误，故障排查
		不亮 ○	未通电：故障排查，最终更换执行器。

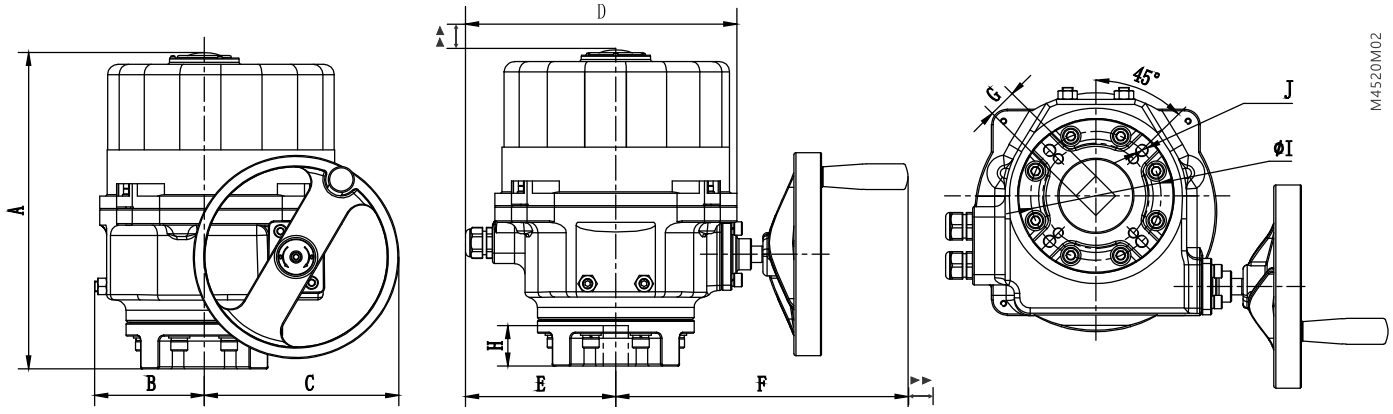
en	As a general rule, the LED can assume only the states shown above (continuously red, flashing, or off).
zh-cn	一般来说，LED 只能呈现上述状态（持续红色、闪烁或关闭状态）。

en	1)	When power supply to actuator but no Y control signal and also calibration not started, LED will be continuously red too.
zh-cn	1)	当向执行器供电但没有 Y 控制信号且校准未开始时，LED 灯也会持续保持红色状态。

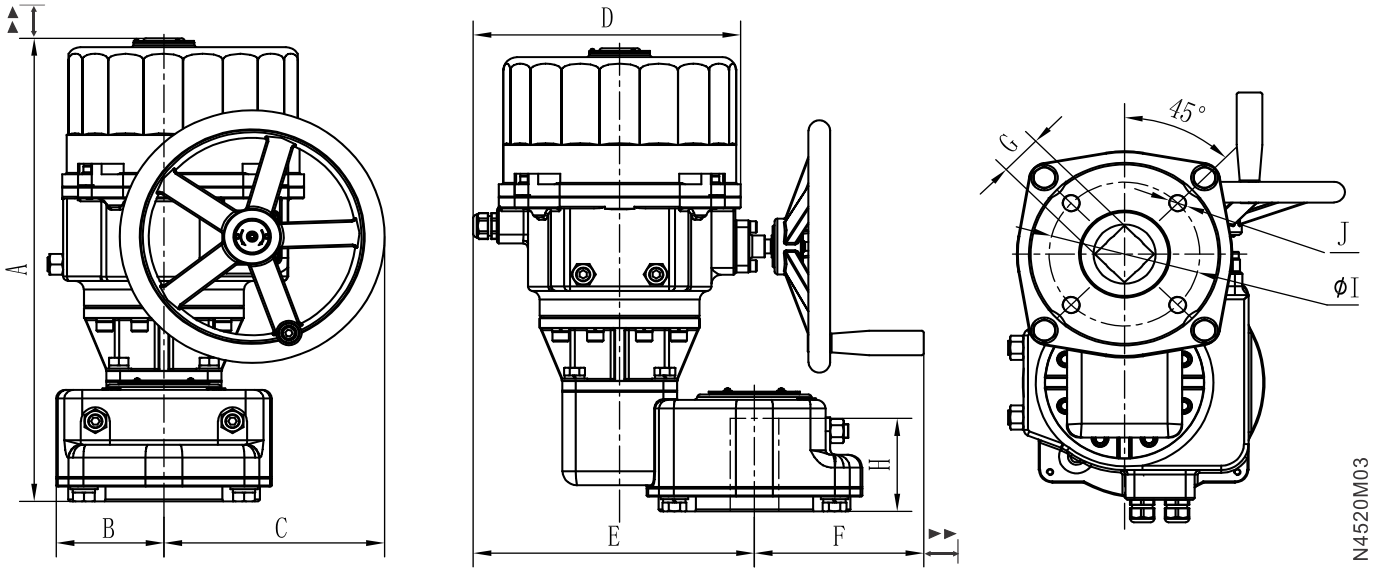
Dimensions/尺寸 (mm)



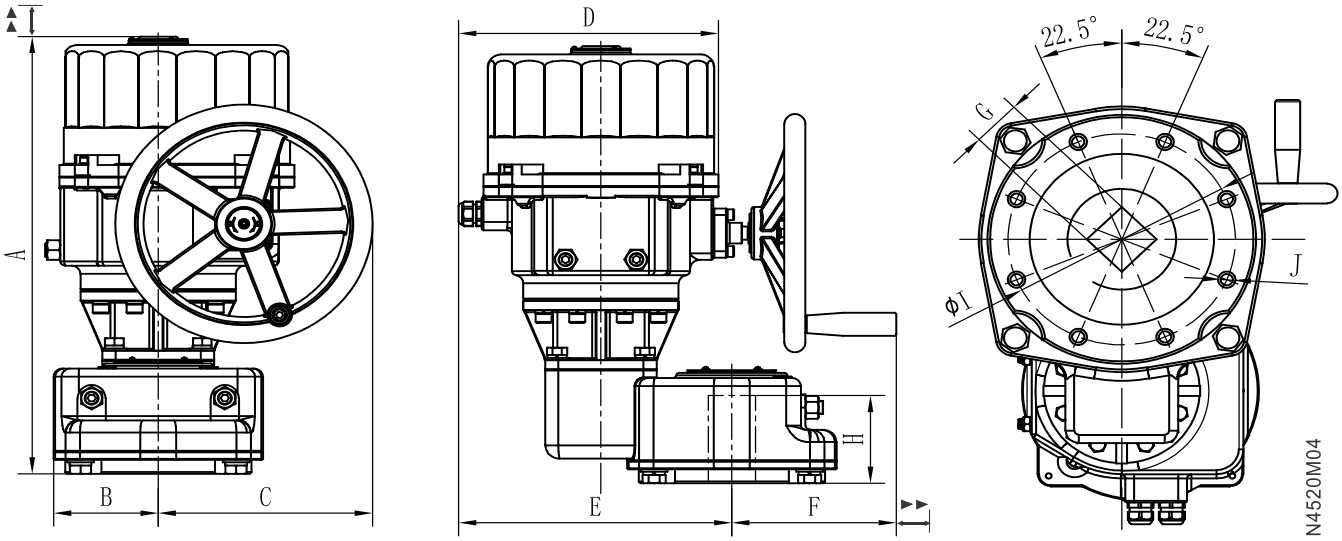
Product No.	A	E	F	H	G □	Ø I	J	Weight [kg]	EN ISO 5211
SQL321B25	179	57	114	20	11	70	4-M8	3.6	F07
SQL361B25	209	57	114	20	11	70	4-M8	3.8	F07
SQL351B25	209	57	114	20	11	70	4-M8	3.8	F07
SQL321B50	179	57	114	20	17	70	4-M8	3.6	F07
SQL361B50	209	57	114	20	17	70	4-M8	3.8	F07
SQL351B50	209	57	114	20	17	70	4-M8	3.8	F07
▲ ▲	►►	⩾ 200 mm：For mounting, connection, operation, service, etc./用于安装，连接，运行，服务等。							



Product No.	A	B	C	D	E	F	G □	H	Ø I	J	Weight [kg]	EN ISO 5211
SQL321B150 SQL361B150 SQL351B150	250	77	125	216	125	242	17	35	70	4-M8	11	F07
SQL321B270 SQL361B270 SQL351B270	308	105	187	262	150	280	22	55	102	4-M10	22	F10
SQL321B570 SQL361B570 SQL351B570	308	105	187	262	150	280	27	55	102 125	4-M10 4-M12	22	F10/F12
SQL321B1400 SQL361B1400 SQL351B1400	532	118	242	293	308	186	36	65	140	4-M16	35	F14
▲ ▲	►►	≥ 200 mm：For mounting, connection, operation, service, etc./用于安装，连接，运行，服务等。										



Product No.	A	B	C	D	E	F	G □	H	Ø I	J	Weight [kg]	EN ISO 5211
SQL321B2650 SQL361B2650 SQL351B2650	532	118	242	293	308	186	46	130	165	4-M20	76	F16
▲ ▲ ►►	≥ 200 mm：For mounting, connection, operation, service, etc./用于安装，连接，运行，服务等。											



Product No.	A	B	C	D	E	F	G □	H	Ø I	J	Weight [kg]	EN ISO 5211
SQL321B6000 SQL361B6000 SQL351B6000	545	160	242	293	343	160	60	150	254	8-M16	107	F25
▲ ▲ ►►	≥ 200 mm：For mounting, connection, operation, service, etc./用于安装，连接，运行，服务等。											

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