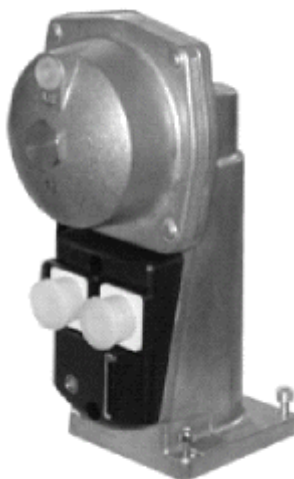


On / off



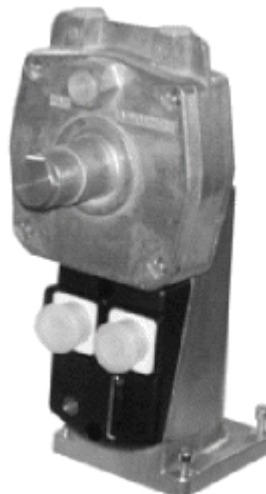
SKP15...

On / off
with constant pressure
governor



SKP25...

On / off
with differential pressure
governor



SKP55...

On / off
with pressure ratio
controller



SKP75...

Actuators for Gas Valves

SKPx5...

- ON / OFF safety shutoff feature conforming to EN 161 in connection with gas and air valves from Siemens Building Technologies
- Damped opening (rapid closing)
- Very low power consumption
- Suitable for gases of gas families I...III
- Optionally with / without end switch (factory set)
- Plug-in connection facility
- Electrical indication of operation
- Stroke indication
- Supplementary Data Sheets (refer to Data Sheets on gas and air valves)

The SKPx5... and this Data Sheet are intended for use by OEMs which integrate the actuators in their products.

Use

The SKP... are designed for use with the following types of valves:

Type of valve	Medium	Data Sheet
VGG... VGF... VGH...	Natural gas Gases of gas families I...III	7636
VGD2... VGD4...	Natural gas Gases of gas families I...III	7631
VRF... VRH...	Biogas (used with SKPx5..., on request)	7633
VLF...	Hot air	7637

SKP... in general

The combination of actuator and valve provides the following functions:

- Safety shutoff valve (SKP15...)
- Safety shutoff valve with gas pressure governor / controller (SKP25..., SKP55..., and SKP75...)

The electrohydraulic SKP... actuators together with the valves are designed for use with gases of gas families I...III and air. They are used primarily on gas-fired combustion plant. The actuators open slowly and close rapidly. They can be combined with any of the above mentioned valve types and nominal sizes. The actuator can be supplied with end switch (for indicating the fully closed position).

For information about valve sizing, refer to the «Valve sizing chart» in the Data Sheet of the relevant valve.

SKP25...

The SKP25... operates as a constant pressure governor with a setpoint spring.

Its field of use are primarily forced draft gas burners

- with mechanical fuel / air ratio control
- with electronic fuel / air ratio control

SKP25.7...

The SKP25.7... operates like the SKP25... constant pressure governor but also features electrical adjustment of the setpoint spring.

Its field of use are primarily

- modulating or multistage atmospheric burners
- individual burners or groups of burners on industrial furnaces
- remote control of the gas / air ratio with burners operating with rigid ratio control.

SKP55...

The SKP55... operates as a differential pressure governor.

Its field of use are primarily

- combustion plants with combined heat recovery systems
- burners with adjustable fuel / air mixing devices in the burner head
- plants where pressure conditions in the burner and in the combustion chamber do not change in proportion to load changes
- plants with negative pressure levels on the gas or air side

SKP75...

The SKP75... operates as a ratio controller and provides control of the gas pressure depending on the pressure of the combustion air, ensuring that the gas / air ratio remains constant across the entire load range.

Its field of use are primarily modulating forced draft gas burners.

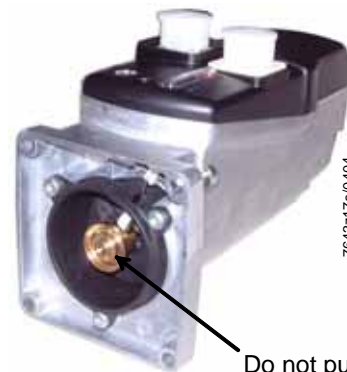
Warning notes



To prevent injury to persons, damage to property or the environment, the following warning notes should be observed!

Do not open, interfere with or modify the actuators!

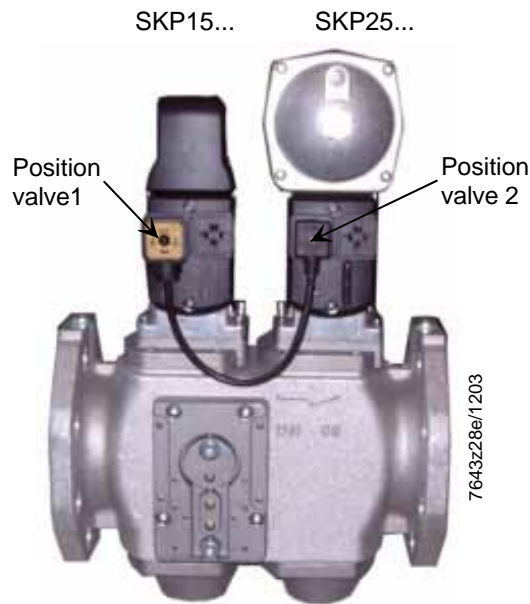
- All activities (mounting, installation and service work, etc.) must be performed by qualified staff
- Check to ensure that the impulse pipes are properly fitted and tight
- Fall or shock can adversely affect the safety functions. Such actuators may not be put into operation, even if they do not exhibit any damage
- If mains voltage is fed to the end switch via the second plug-in space, protective earth must be connected to the actuator via the same plug
- Use of connectors conforming to DIN EN 175301-803-A is mandatory
- The connectors used must have cable strain relief
- The pump's stem may not be pulled out using the overstroke element since that part could become loose



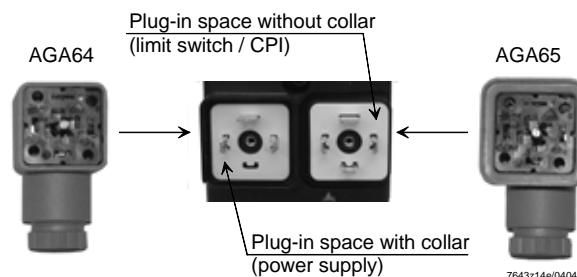
7643z17e/0404

Do not pull here!

SKP15... / SKP25...
with connecting cable
AGA62.000A000



VGD40...



For connection of end switch, a connector with collar should be used (protection against electric shock hazard), refer to "Accessories"!

Engineering notes

Design of the gas train	If the available gas pressure exceeds the maximum permissible operating pressure of the valve / SKP... (refer to the Data Sheet of the relevant valve), the gas pressure must be lowered by an upstream pressure controller. The pressure switch for lack of gas must always be fitted upstream of the gas valve when used in connection with the SKP... The inside diameter of the mounting pipe must be a minimum of 6 mm.
SKP25..., SKP55..., SKP75...	The impulse pipes must be installed such that the differential pressure can be acquired with no disturbance (e.g. resulting from unfavorable flow conditions). Pressure test points must not protrude and be flush with the inside diameter of the pipe or duct wall. The impulse lines to the governor / controller should be as short as possible, enabling the governor / controller to respond quickly should sudden load changes occur.
SKP75...	<ul style="list-style-type: none">• Installation of impulse pipes In the case of unsafe combustion chamber pressure pipes (e.g. resulting from potential leaks), the setting must also be checked during operation without having the combustion chamber pipe connected, especially with respect to maximum burner capacity. To achieve a correct and even gas / air ratio over the entire control range, the gas and air pressure signals must be picked up at points where there is no turbulence. Recommendations:<ul style="list-style-type: none">– The gas pressure should be acquired at a distance of 5 times the nominal pipe size downstream from the valve– Do not use the lateral test points on the VG... valve body for picking up the pressure• Installation of impulse pipes The impulse pipes must be fitted such that the differential pressure can be acquired with no disturbance. With gas / air ratios > 3, the impulse pipes for the combustion air and the combustion chamber pressure must have an inside diameter of at least 8 mm. The impulse pipe for the combustion chamber pressure must be fitted such that the gases will cool down in the vicinity of the impulse pipe and condensing gases cannot enter the controller but will return to the combustion chamber.• Considering the combustion chamber pressure If the resistance value of the combustion chamber / heat exchanger / stack system is constant, the combustion chamber pressure changes in proportion to the gas and combustion air pressure as the burner's output changes. In that case, the combustion chamber pressure need not be fed to the SKP75... as a disturbance variable. However, if the combustion chamber pressure does not change to the same extent as the gas and air pressure – as this is the case in plants with flue gas fan or modulating flue gas damper – the combustion chamber pressure must be fed to the SKP75... as a disturbance variable, enabling the controller to counteract.

Mounting notes

- Ensure that the relevant national safety regulations are complied with
- The quadratic arrangement of the fixing holes allows the actuator to be fitted in 4 different positions, each step being 90°
- The actuator can be mounted or replaced while the system is under pressure; sealing materials are not required
- Follow the Mounting Instructions included with the actuators:
 - For SKP15...: M7643
 - For SKP25...: M7643.1
 - For SKP25.7...: On request
 - For SKP55...: M7643.2
 - For SKP75...: M7643.3

Installation and commissioning notes

SKP... in general

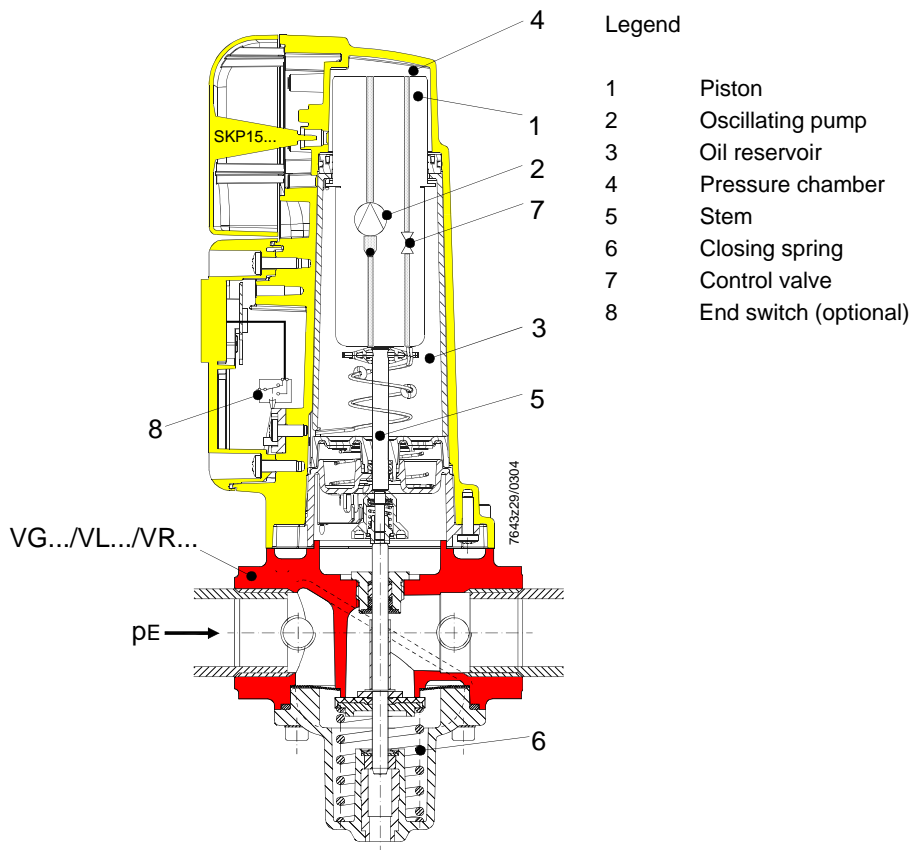
- Electrical commissioning may only be performed when the SKP... is fitted to the valve; otherwise, the SKP... can be damaged
- Power is supplied and connection of the end switch is made directly via a connecting cable (conforming to DIN EN 175 301-803-A)
- The end switch is factory set

Functioning principle of 1-stage actuator with safety shutoff feature

When power is applied, the pump will be activated and the control valve closed. Oil is now pumped from the chamber below the piston to the pressure chamber above the piston. The oil pressure causes the piston to move downward, thereby opening the valve – against the pressure of the closing spring. The pump remains energized until the closing command is given. When power is removed, or in the event of a power failure, the pump will be deactivated and the control valve opened so that the closing spring pushes the piston back. The return flow system is sized such that the counter-stroke required for reaching the fully closed position is completed within about 0.6 seconds.

SKP15... complete with valve

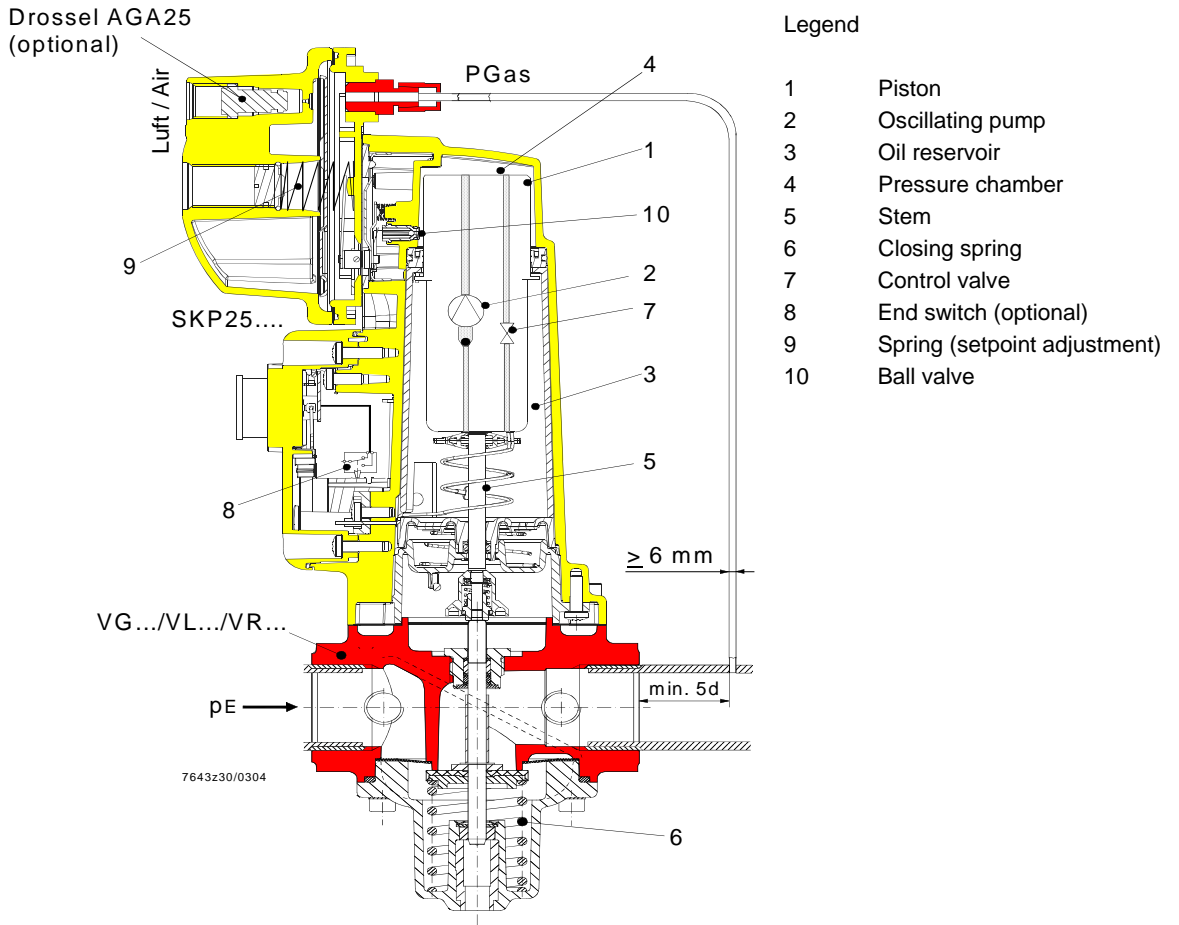
(Schematic drawing)



SKP2..., SKP5... and SKP7... control a bypass valve via their pneumatic controller, thereby opening the VG... gas valve.

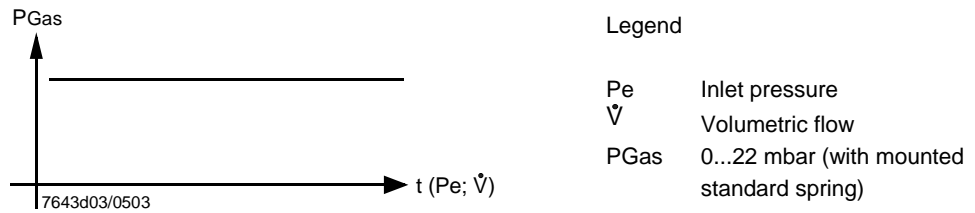
SKP25... complete with valve

(Schematic drawing)



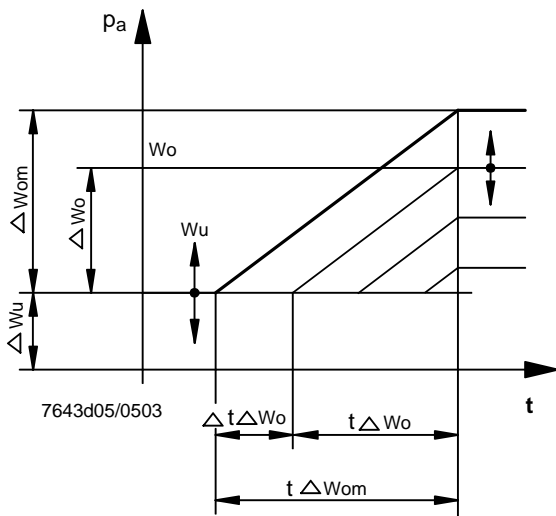
SKP25...

The setpoint adjustment «PGas» must be made manually by turning the adjusting screw that acts on the setpoint spring. For setpoint springs, refer «Accessories».



SKP25.7...

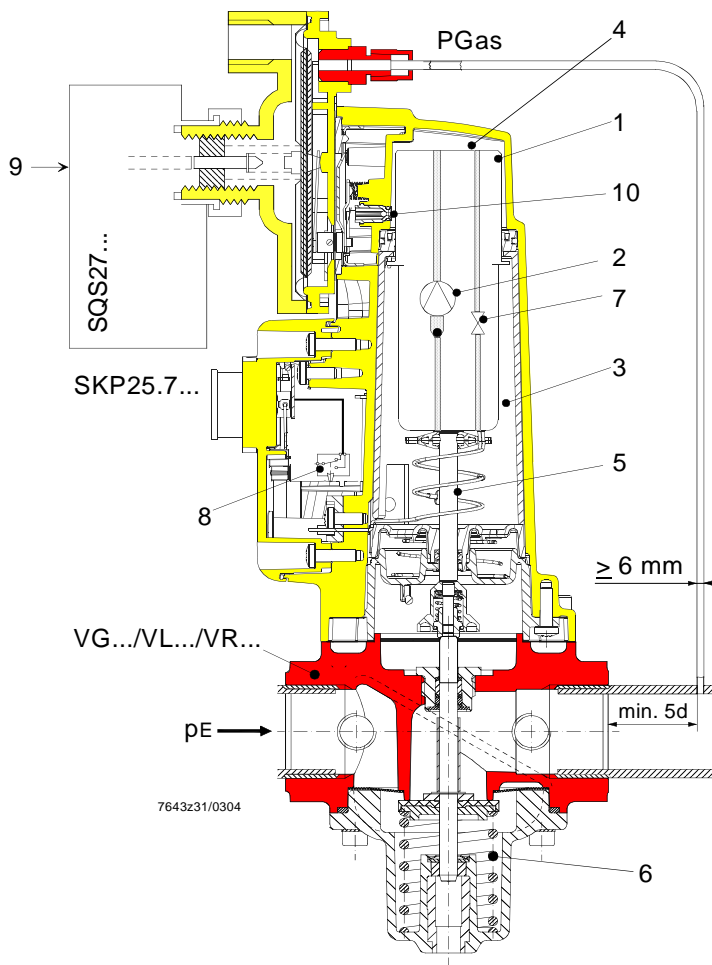
Mode of operation of gas pressure governor with SQS27... actuator



On the gas outlet side, the gas pressure governor maintains the gas pressure at the predefined setpoint. Through an electrical signal delivered to the motorized setpoint adjuster, the predefined setpoint changes in proportion to the length of the electrical pulse signal, increasing or decreasing, depending on the direction of the pulse signal of SQS27... When a predefined maximum or minimum setpoint is reached, the outlet pressure remains constant. The time required to cross the upper setpoint range « Δwo » is the same in both directions. As the upper setpoint range « Δwo » changes, the running time « $t\Delta wo$ » changes proportionally to cross the upper setpoint range « Δwo ». At the lower setpoint limitation « Δwu », the motorized setpoint adjuster runs idle during the period of time « $\Delta t\Delta wo$ ». This means that « $\Delta t\Delta wo$ », or part of it, can occur as dead time.

SKP25.7... complete with valve

(Schematic drawing)



Legend

- 1 Piston
- 2 Oscillating pump
- 3 Oil reservoir
- 4 Pressure chamber
- 5 Stem
- 6 Closing spring
- 7 Control valve
- 8 End switch (optional)
- 9 Mark
- 10 Ball valve (bypass)

Setpoint springs
for SKP25.7...

Delivery ex works for the following setpoint ranges:

Δwu 0.5...4 mbar $\pm 15\%$

Δwo 0...18 mbar $\pm 15\%$

For springs required for other pressure ranges, refer to the table below.

If setpoint ranges other than the standard range are required, the setpoint spring can be changed. For modifications on site, each SKP25.7... is supplied with a plastic bag containing another 7 springs.

Setpoint spring		Δwo mbar $\pm 15\%$	Setpoint spring		Δwu mbar $\pm 15\%$
Color	Dia. [mm]		Color	Dia. [mm]	
Steel *	7	0...18	Steel *	12	0.5...4
Red (AGA24)	7.5	0...45	Red (AGA23)	12.5	100...250
Green (AGA18)	8	0...90	Green (AGA20)	12.5	2...15
White (AGA21)	7	0...10	Blue (AGA19)	13	10...30
			Yellow (AGA22)	12.5	15...120

* SKP25.7... have the steel-colored springs integrated

Setpoint springs for « Δwo » cannot be used for « Δwu », and vice versa (see spring diameter in the table). All combinations of « Δwo » and « Δwu » are possible.

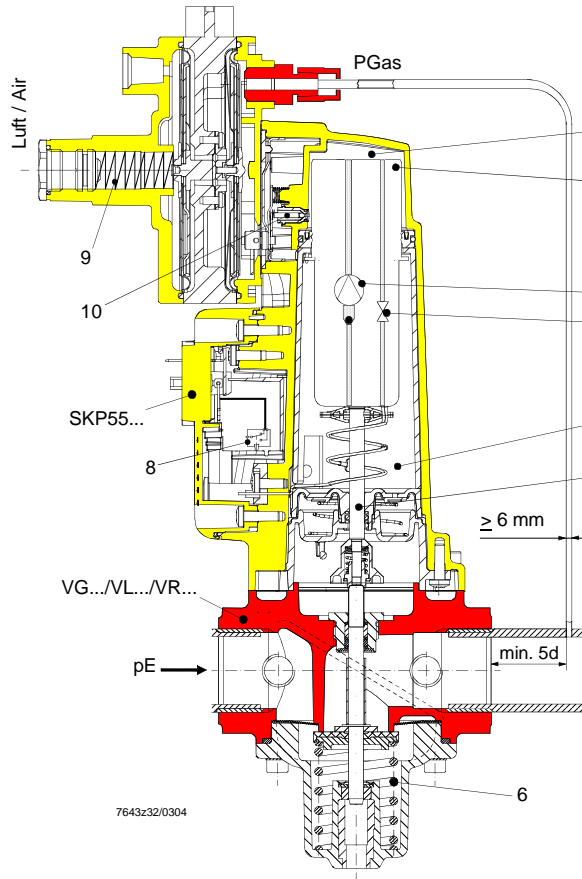
The position of the setpoint readjustment can be read off at the end of the spindle of the SQS2...

Meaning of marking on the SQS27...:

Spindle fully extended	At mark «0»	Setpoint at the lower limit
Spindle fully retracted	At mark «I»	Setpoint at the upper limit

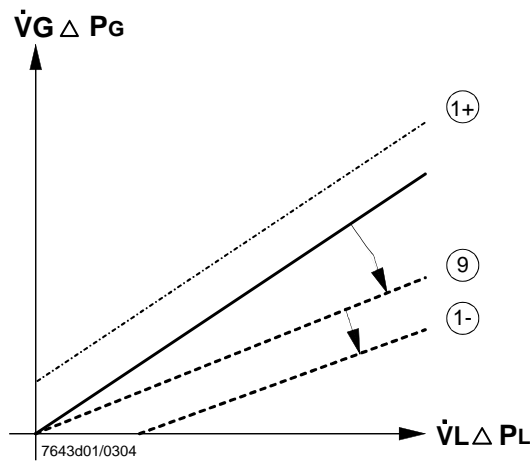
SKP55... complete with valve

(Schematic drawing)



Legend

- 1 Piston
- 2 Oscillating pump
- 3 Oil reservoir
- 4 Pressure chamber
- 5 Stem
- 6 Closing spring
- 7 Control valve
- 8 End switch (optional)
- 9 Spring (setpoint adjustment)
- 10 Ball valve (bypass)

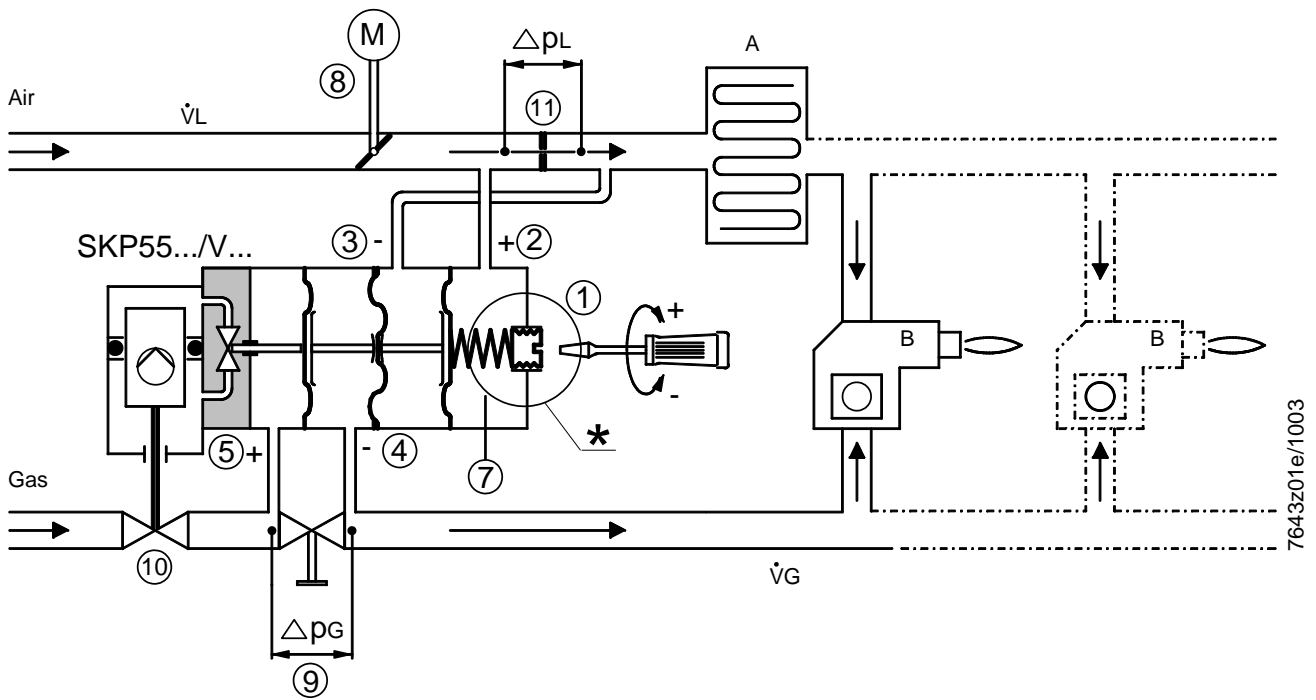


Example:

Adjusted gas / air ratio for burner operation with excess air $\textcircled{1+}$. The percentage of excess air is constant across the entire load range. Gas / air ratio adjustment with the adjustable orifice on the gas side (see position $\textcircled{9}$).

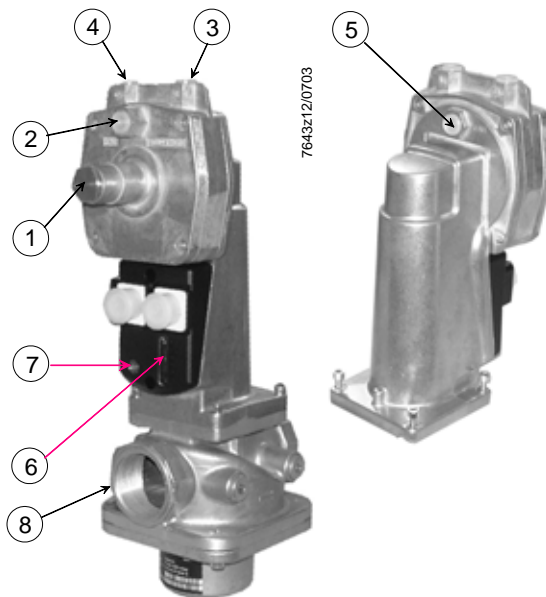
Legend

- \dot{V}_G Volumetric air flow
- \dot{V}_L Volumetric gas flow



*** Safety notes:**

Arrangement of air damper ⑧ / orifice ⑪ always as shown, that is, orifice ⑪ downstream from the air damper ⑧



- ① Adjustment of parallel displacement of working characteristic
* Check combustion values with cap fitted
- ② Test point for air pressure (+)
- ③ Test point for air pressure (-)
- ④ Test point for gas pressure (-)
- ⑤ Test point for gas pressure (+)
- ⑥ Stroke indication
- ⑦ Indication of operating state (LED)
- ⑧ VG... gas valve

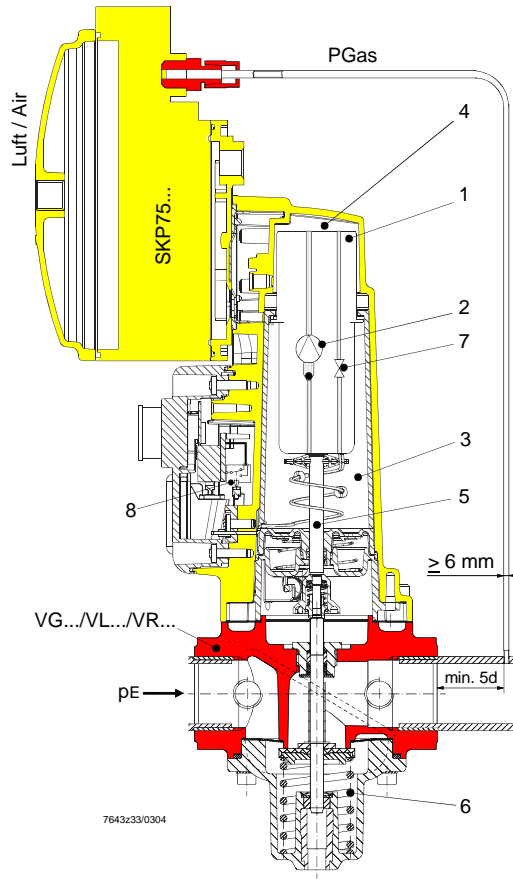
Legend

- Δp_G Differential pressure across orifice on the gas side
- Δp_L Differential pressure across orifice on the air side
- A Air heating coil (recuperator)
- B Burner
- M Actuator

- Adjustment of governor on modulating burners prior to startup:
 - The adjusting screw ① on the SKP55... should be set to a gas / air ratio curve which passes through the neutral point. The SKP55... is supplied with that factory setting.
Adjustment in the field can be made as follows:
Note:
Fit the cap before measuring the combustion value and after the setting is made.
Turn adjusting screw ① in counterclockwise direction until spring ⑦ is completely loose. Shut off the gas supply upstream of the SKP55... Switch on the SKP55... Turn adjusting screw ① in clockwise direction until valve opens
 - Bring the adjustable orifice to the precalculated value. That value with the same pressure differential on the air and gas side must lead to practically stoichiometric combustion
 - Start the burner and run it to about 90 % of the nominal load
 - Measure the combustion quality and make adjustments of the flow rate with the adjustable orifice until optimum measured values are reached (fine adjustment)
 - Return to low-fire operation. Check the combustion and readjust if necessary the position of the working characteristic with the setting screw ① on the SKP55... until optimum measured values are reached. Clockwise rotation → more gas. Counterclockwise rotation → less gas, that is, parallel displacement of the working characteristic towards lack of air or excess air
 - Limit the air damper ⑧ for low-fire operation
 - If a significant parallel displacement of the working characteristic was required, the setting must be checked again at 90 % of the nominal load and then readjusted, if required
 - Run the burner to the predefined nominal load with the help of the air damper ⑧ and limit the actuator position for that load
 - Check the flue gas values at a few positions of the load range. Make readjustments in the nominal load range with the adjustable orifice, and in the low-fire range with screw ① on the governor of the SKP55...

SKP75... complete
with valve




(Schematic drawing)



Legend

- 1 Piston
- 2 Oscillating pump
- 3 Oil reservoir
- 4 Pressure chamber
- 5 Stem
- 6 Closing spring
- 7 Control valve
- 8 End switch (optional)

Adjustment of the gov-
ernor on modulating
burners

- Use setting screw ① / «PGAS» / «PAIR» to set the gas / air ratio to the required value (coarse setting) and the scale  with setting screw ② to zero
- Start the burner and run it to about 90 % of the nominal load
- Measure the CO₂ or O₂ content of the flue gases and optimize the adjustment with setting screw ① / «PGAS» / «PAIR» 
- Return to low-fire operation, check the CO₂ or O₂ content of the flue gases. Readjust if necessary the position of the working characteristic with setting screw ② /  until optimum measured values are attained
- Limit the air damper position for low-fire operation



Meaning of setting screw markings:

- + more gas
- less gas

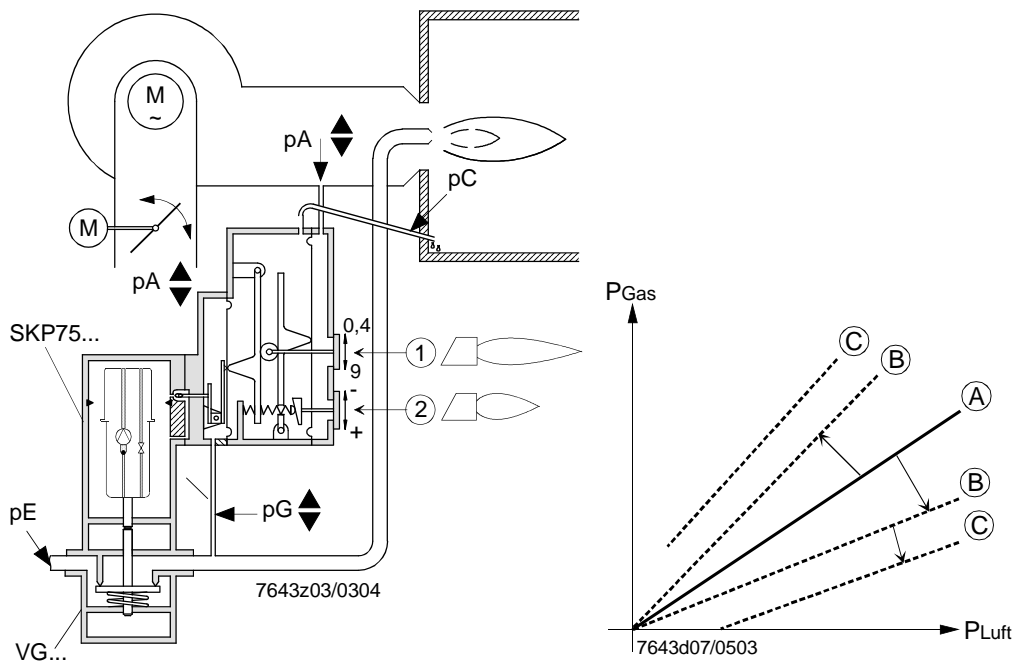
If a significant parallel displacement of the working characteristic was required to obtain optimum CO₂ or O₂ values in low-fire operation, the adjustment of the pressure ratio at nominal load or 90 % of the nominal load must be checked again and readjusted, if required.

- Run the burner to the required output and limit the nominal load air damper position
- Check the flue gas values at various positions of the load range

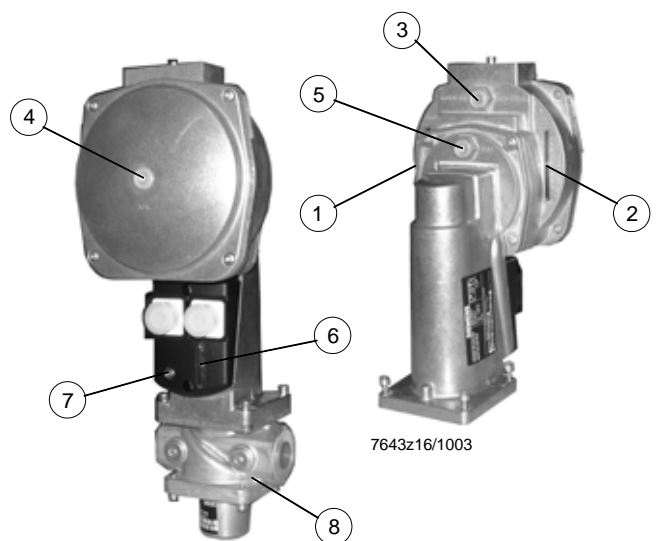
If readjustments are required:

- Use setting screw ① / «PGAS» / «PAIR»  in the nominal load range
- Use setting screw ② /  to make parallel displacements of the characteristic in the flow-fire range

If the gas / air pressure ratio lies outside the setting range, an orifice in the gas or air flow can be used to adjust the pressure at the test points on the burner side. Prerequisite is that there is a sufficient gas or air pressure reserve on the inlet side.

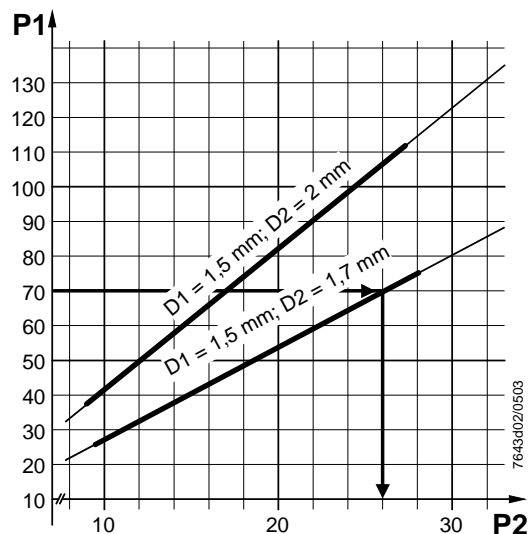


- ① Setting and display of the gas / air ratio
- ② Setting and display of parallel displacement of the working characteristic
- ③ Test point for combustion chamber pressure
- ④ Test point for air pressure
- ⑤ Test point for gas pressure
- ⑥ Stroke indication
- ⑦ Operation indicator (LED)
- ⑧ Gas valve VG...



Function

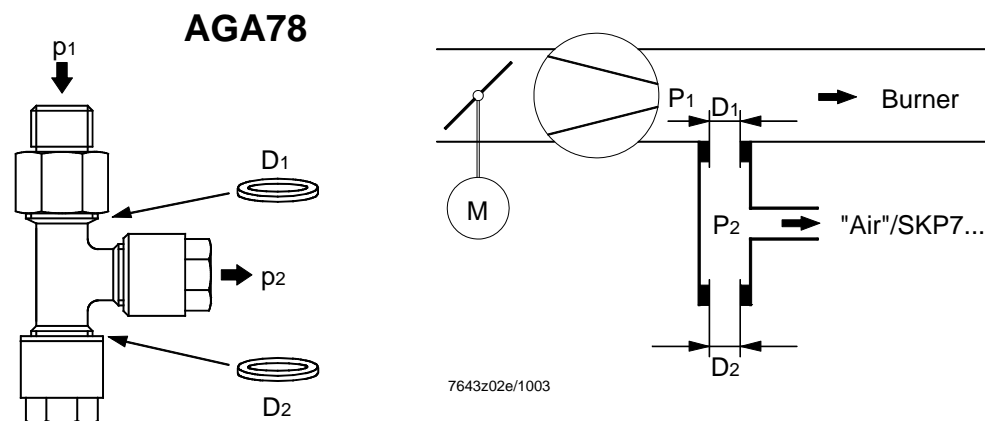
If the air pressure exceeds the maximum value of 30 mbar or 50 mbar permitted for the governor, the pressure must be lowered with a reducing T-piece AGA78 (also refer to «Technical data»).



Example:
 $p_1 = 70 \text{ mbar}$
 $D_1 = 1.5 \text{ mm}$
 $D_2 = 1.7 \text{ mm}$

Wanted: Air pressure signal «p2» for the SKP75...
 $p_2 = 26 \text{ mbar}$

Air is continuously vented to atmosphere via orifice «D2». The pressure of the following medium will be reduced via throttle «D1». The illustration below shows the correlations.



The reducing T-piece is supplied ready for mounting, with $D_1 = 1.5 \text{ mm}$ and $D_2 = 1.7 \text{ mm}$.
 D_2 with a diameter of 2 mm is included as a loose item.

Norms and certificates



ISO 9001: 2000
Cert. 00739



ISO 14001: 1996
Cert. 38233

In connection with
VG... valves



Conformity to EEC directives
– Electromagnetic compatibility EMC (immunity)
– Directive for gas appliances
– Directive for pressure devices

89 / 336 EEC
90 / 396 EEC
97 / 23 EEC

Service notes

- Make the safety test according to «Commissioning notes»

Disposal notes



The actuator contains electrical and electronic components and hydraulic oil and may not be disposed of together with household waste.
Local and currently valid legislation must be observed.

Type summary (other types of actuators on request)

The complete gas shutoff assembly or pressure governor / controller assembly consists of actuator and valve.

SKP15...	Mains voltage	AC 100...110 V	AC 220...240 V
	1-stage opening and closing, without end switch	SKP15.000E1	SKP15.000E2
	1-stage opening and closing, with end switch	SKP15.001E1	SKP15.001E2

SKP25...	1-stage opening and closing, without end switch, with pressure governor up to 22 mbar	SKP25.003E1	SKP25.003E2
	1-stage opening and closing, with end switch, with pressure governor up to 22 mbar	SKP25.001E1	SKP25.001E2
	1-stage opening and closing, without end switch, with pressure governor up to 22 mbar, high-pressure version	SKP25.403E1	SKP25.403E2
	1-stage opening and closing, with end switch, with pressure governor up to 22 mbar, high-pressure version	SKP25.401E1	SKP25.401E2
	1-stage opening and closing, without end switch, for electrical setpoint adjustment	SKP25.703E1 ¹⁾	SKP25.703E2 ¹⁾
	1-stage opening and closing, with end switch, for electrical setpoint adjustment	SKP25.701E1 ¹⁾	SKP25.701E2 ¹⁾

¹⁾ On request

SKP55...	1-stage opening and closing, without end switch, with differential pressure governor	SKP55.003E1	SKP55.003E2
	1-stage opening and closing, with end switch, with differential pressure governor	SKP55.001E1	SKP55.001E2

SKP75...	1-stage opening and closing, without end switch, with pressure ratio controller	SKP75.003E1	SKP75.003E2
	1-stage opening and closing, with end switch, with pressure ratio controller	SKP75.001E1	SKP75.001E2
	1-stage opening and closing, without end switch, with pressure ratio controller, with greater parallel displacement	SKP75.503E1	SKP75.503E2
	1-stage opening and closing, with end switch, with pressure ratio controller, with greater parallel displacement	SKP75.501E1	---

Ordering examples

When ordering, please give the complete type reference of the actuator (refer to «Type summary»). All products must be ordered as separate items.

Example of SKP15...

Actuator

- On / off
- With end switch
- For AC 230 V / 50 Hz

SKP15.001E2

Connector valve actuator (plug)

AGA64

Connector end switch (plug)

AGA65

The complete gas valve shutoff pressure governor assembly consists of actuator and valve. Please order the required valves as separate items (refer to the relevant Data Sheets). Actuator and valve are supplied unassembled. Assembly is very straightforward and wird vorzugsweise am Brenner vorgenommen.

Complete combination of actuator / valve consisting of:

- VG... gas valve
- SKP15.001E2 actuator
- Accessories

Example of SKP25...

Gas pressure governor with safety shutoff feature:

- Without end switch
- For AC 230 V / 50 Hz

SKP25.003E2

Connector valve actuator (plug)

AGA64

Combination of gas pressure governor / valve consisting of:

- VG... gas valves (refer to Data Sheets N7636 and N7631)
- SKP25.003E2 actuator
- Accessories, e.g. AGA25 (damping throttle)

Accessories (not included in the delivery, to be ordered as a separate item)



Connecting cable with plugs

- For powering both SKPs on the double valve (VGD...) with connector (AGA64)

AGA62.000A000



Connector for valve actuator (power supply)

- Plug-in connector
- Conforming to DIN EN 175 301-803-A
- Triple pole + ⊕
- Dia. 6...9 mm / max. 1.5 mm²

AGA64



Connector for end switch

- Plug-in connector
- Conforming to DIN EN 175 301-803-A
- Triple pole + ⊕
- Dia. 4.5 ...11 mm / max. 1.5 mm²

AGA65



SQS27... motorized setpoint adjuster for SKP25.7...

- Refer to Mounting Instructions M7644

refer to «Type summary»



Setpoint spring for SKP25...

- Optional to standard spring (0...22 mbar)
- 15...120 mbar
- Yellow

AGA22



Setpoint spring for SKP25...

- Optional to standard spring (0...22 mbar)
- 100...250 mbar
- Red

AGA23



Damping throttle for SKP25...

- Optional
- See chart

AGA25



Damping throttle for SKP25... / SKP75...

- Optional, pipe connection for 8 mm dia.
- Refer to Mounting Instructions 4 319 2078 0

AGA75



Damping throttle for SKP25... / SKP75...

- Optional
- (Same as AGA75 but with 1/4" threaded connection on both sides)

AGA75E

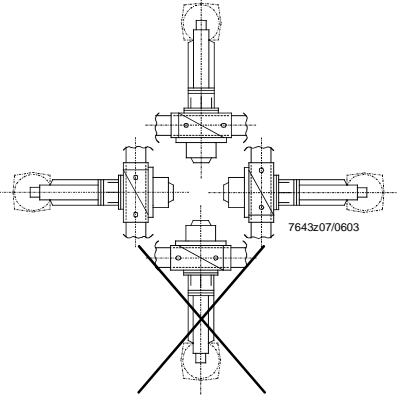


Pressure reducing T-piece for SKP75...

- Optional

AGA78

Technical data

General device data	Mains voltage	AC 220 V –15 %...AC 240 V +10 % AC 100 V –15 %...AC 110 V +10 %
	Mains frequency	50...60 Hz ±6 %
	Power consumption	max. 13.5 VA
	End switch (if fitted)	factory set adjusted as closed position switch
	- Switching capacity	4 (2 A, $\cos\varphi = 0.3$)
	On time	100 %
	Opening time for full stroke	6...10 s (depending on nominal valve size, longer opening times below 0 °C)
	Opening speed	approx. 2 mm / s
	Closing time	< 0.8 s (in the event of power failure)
	Perm. mounting positions	
		always with the diaphragms in the vertical position
	Degree of protection	IP 54 → only ensured when central screw at the connector is tightened
	Stroke	max. 26 mm (valve limits max. stroke)
	Weight	
	- SKP15...	approx. 1.1 kg
- SKP25...	approx. 1.6 kg	
- SKP25.7...	approx. 1.6 kg (without SQS27...)	
- SKP55...	approx. 1.9 kg	
- SKP75...	approx. 2.3 kg	
Perm. media	depending on the type of valve	
Medium inlet pressure	depending on the type of valve	
Perm. medium temperature	depending on the type of valve	
Flow rate	depending on the type of valve	
Perm. test pressure «PG»	1,000 mbar	
Perm. underpressure «PG»	200 mbar	
Environmental conditions	Transport	DIN EN 60 721-3-2
	Climatic conditions	class 2K2
	Mechanical conditions	class 2M2
	Temperature range	-15...+60 °C
	Humidity	< 95 % r.h.
	Operation	DIN EN 60 721-3-3
	Climatic conditions	class 3K5
	Mechanical conditions	class 3M2
	Temperature range	-10...+60 °C (longer opening times below 0 °C)
	Humidity	< 95 % r.h.



Condensation, formation of ice and ingress of water are not permitted!

SKP25...	Setpoint range of outlet pressure	0.5...250 mbar (3 setpoint springs, refer to «Accessories»)	
	Control class	A to DIN EN 88	
	Setting range (setpoint)	max. 250 mbar (gas pressure)	
	Control group	III to DIN 3392	
SKP25.7...	Setpoint ranges $\Delta w_o / \Delta w_u$	refer to «Function diagram»	
SKP55...	Differential pressure ratio (gas / air)	1:1	
	Perm. differential pressure the controller may be subjected to during operation	$\Delta 0.3...200$ mbar	
	Control accuracy	< 10 % at « Δp_{min} » < 1 % at « Δp_{max} »	
	Parallel displacement of working characteristic		
	- Excess gas	1 mbar	
	- Excess air	1 mbar	
	Compensating variable	differential pressure of combustion air ≥ 0.3 mbar	
	Interval required for load change via air damper, from high-fire to low-fire	min. 5 s (depending on valve stroke)	
	SKP75...	Control accuracy	< 10 % at « Δp_{min} » < 2 % at « Δp_{max} »
		Control group	III to DIN 3392
Control variable «Gas pressure»		differential pressure «PG-PF» or «PG-PAir» min. 0.8 mbar max. 120 mbar	
Control class		A to DIN EN 88	
Compensating variable		differential pressure of combustion air (across burner baffle plate «PAir – P _{combustion chamber} ») ≥ 0.5 mbar	
Air pressure at «PGas/PAir»			
≥ 2		max. 30 mbar	
≤ 2		max. 50 mbar for higher pressures, see AGA78 (accessory)	
Gas pressure		max. 120 mbar (gas pressure)	
Setting range pressure ratio		refer to «Type summary»	
- «PGas / PAir»		0.4...9	
Parallel displacement of working characteristic		1 mbar	
- Excess gas		1 mbar	
- Excess air		4.5 mbar	
- Excess with SKP75.5...			
Perm. combustion chamber pressure		depending on the controlled variable gas pressure «PG»	
Recommended distance impulse pipe connection from valve	min. 5 x nominal valve size at a place where there is no turbulence		
Inlet pressure	same as valve		
Perm. test pressure «PG»	1 bar		
Perm. underpressure «PG»	200 mbar		
Interval required for load change via air damper, from high-fire to low-fire	min. 5 s (depending on valve stroke)		

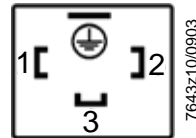
Motorized setpoint
adjuster SQS27...

Mains voltage (control voltage) depending on type	AC 220 V –15 %...AC 240 V +10 % AC 100 V –15 %...AC 110 V +10 %
Mains frequency	50...60 Hz ±6 %
Connecting cable length	1.5 m
Power consumption	1.3 VA
Running time $\Delta t_{\Delta w_{om}}$	max. 75 s (refer to «Type summary»)
Degree of protection	IP 40 (to be ensured through mounting)
Safety class	III to VDE 0631

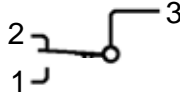
Contact assignment device connector



Valve actuator
Connector AGA64
DIN EN 175 301-803-A
double pole +



End switch
Connector AGA65
DIN EN 175 301-803-A
triple pole +

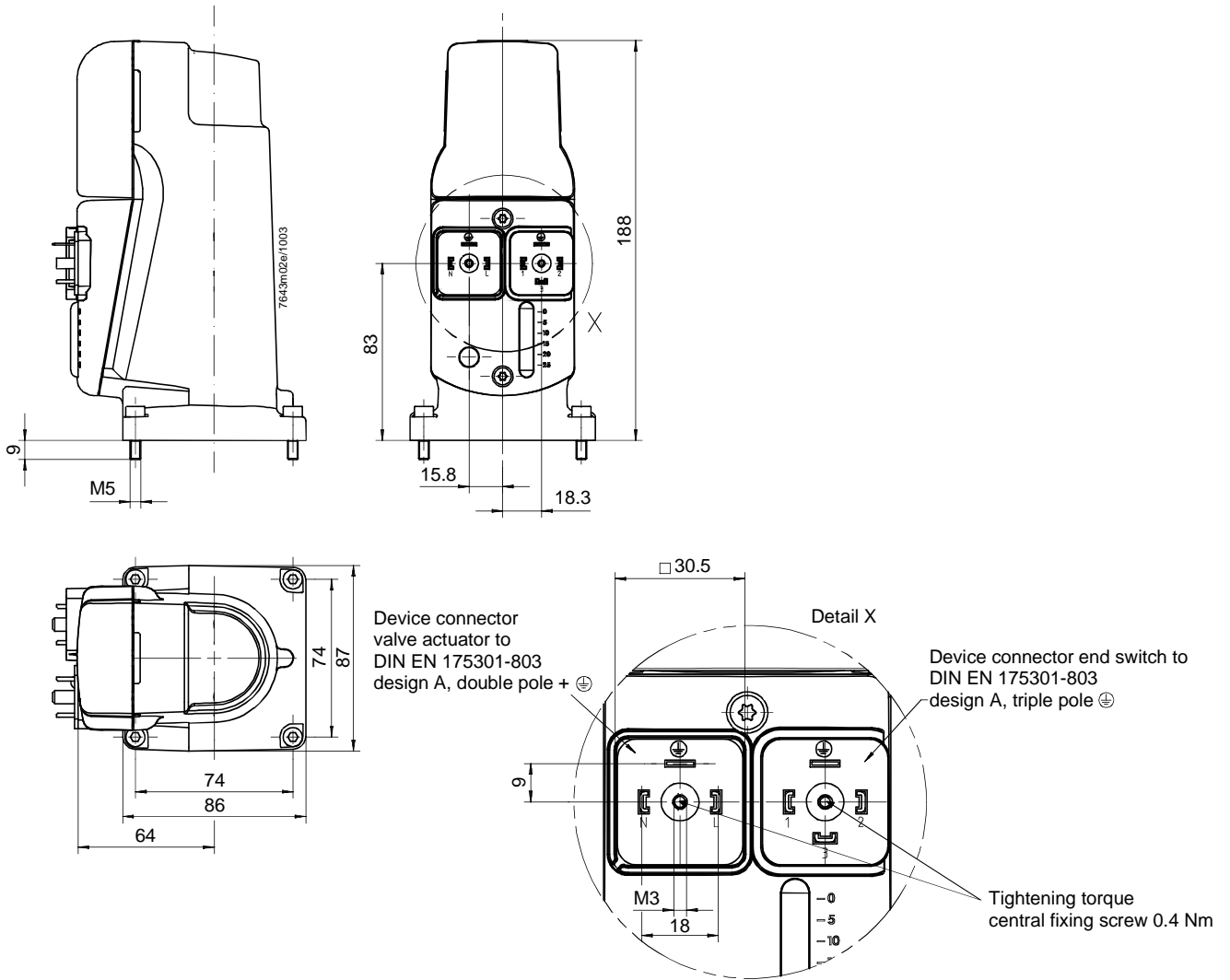


← Valve closed

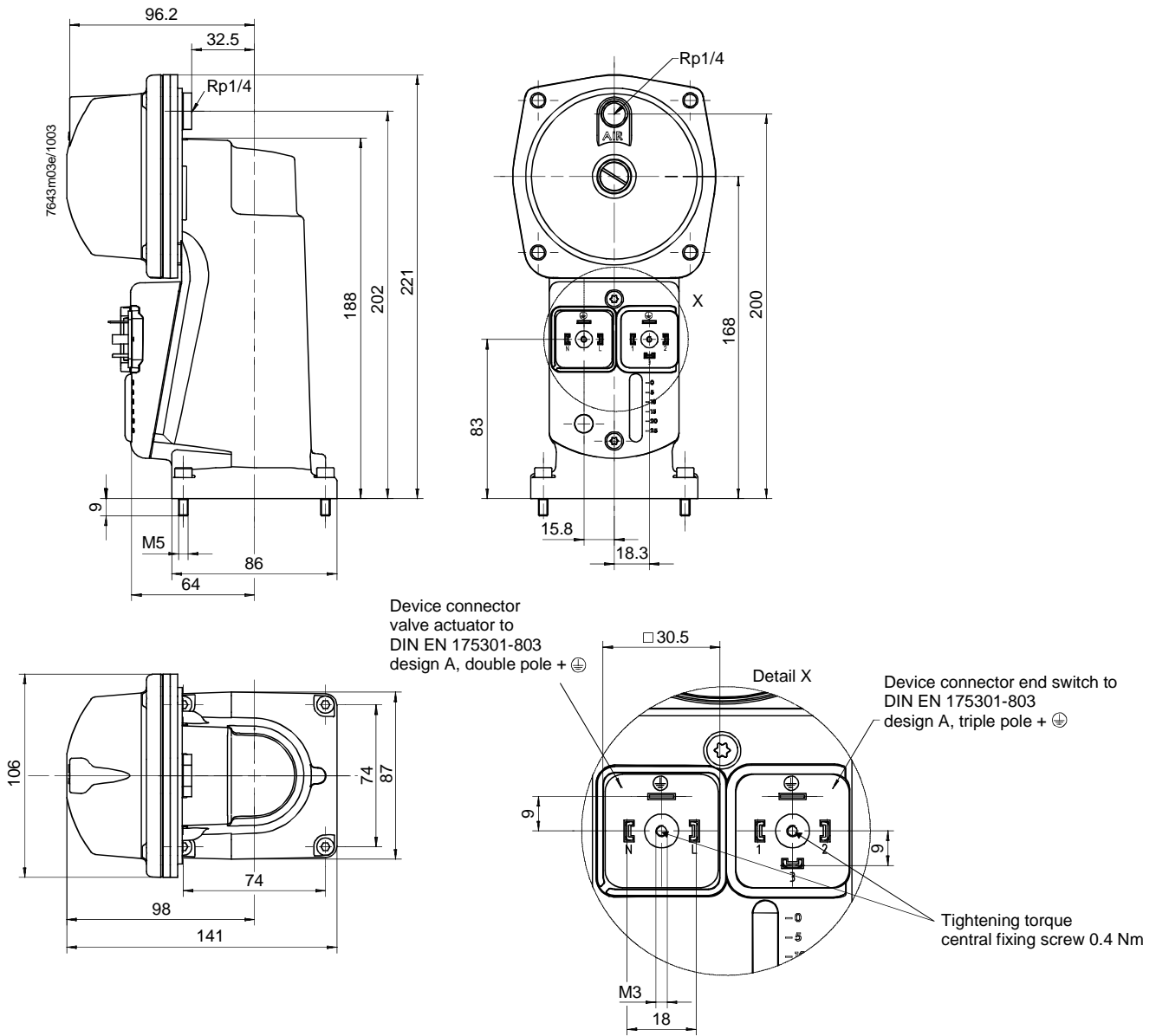
Dimensions

Dimensions in mm

SKP15... actuator



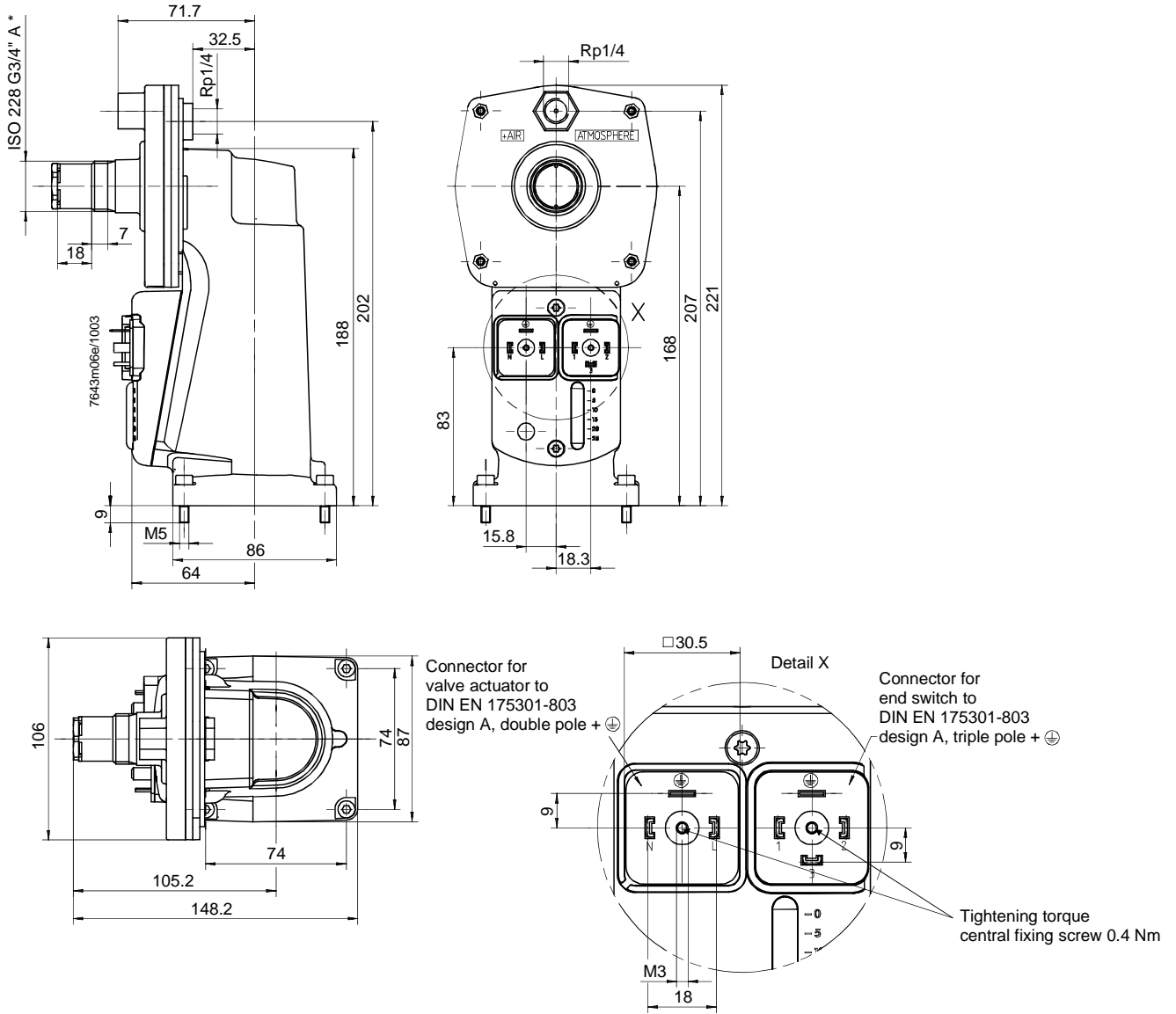
SKP25... actuator



Dimensions (con't)

Dimensions in mm

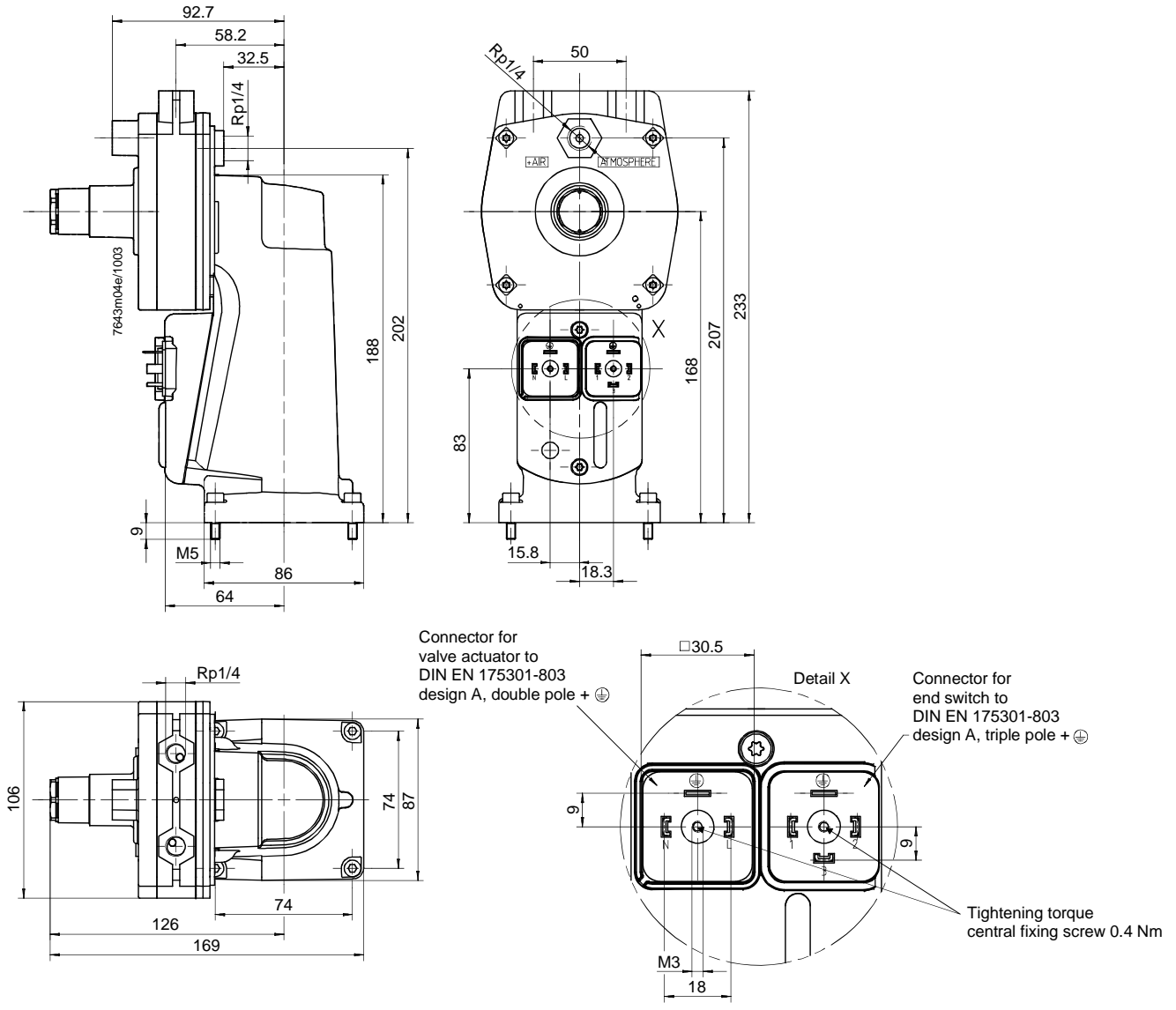
SKP25.7... actuator
without motorized
setpoint adjuster
SQS27...



Dimensions (con't)

Dimensions in mm

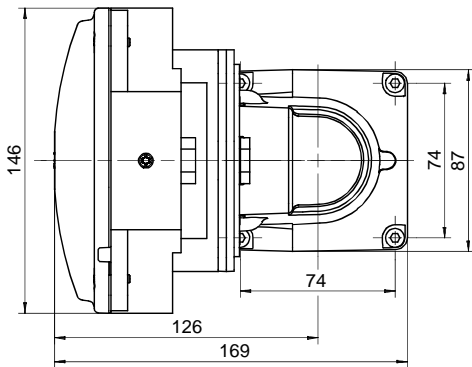
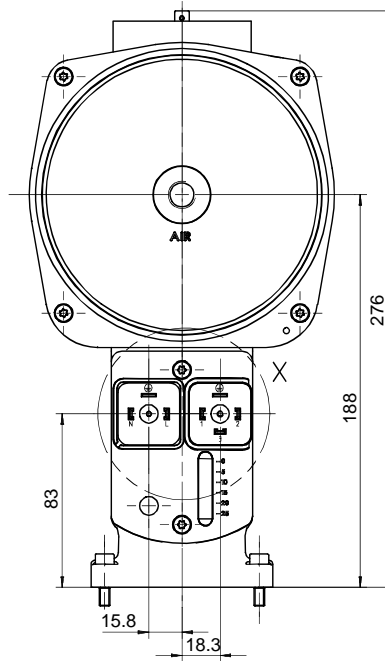
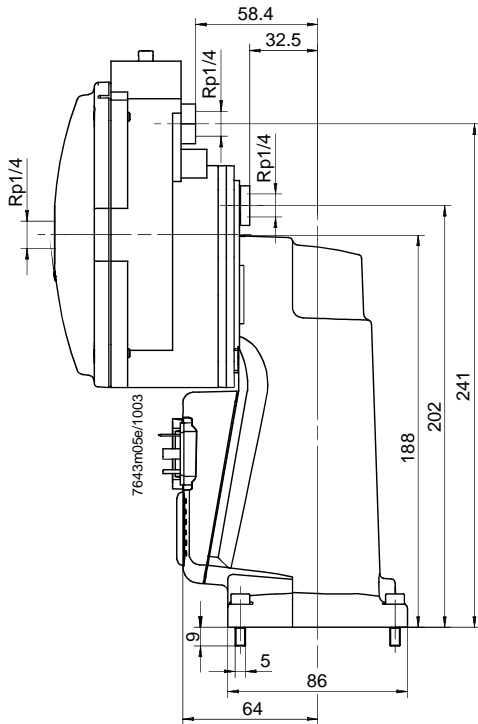
SKP55...



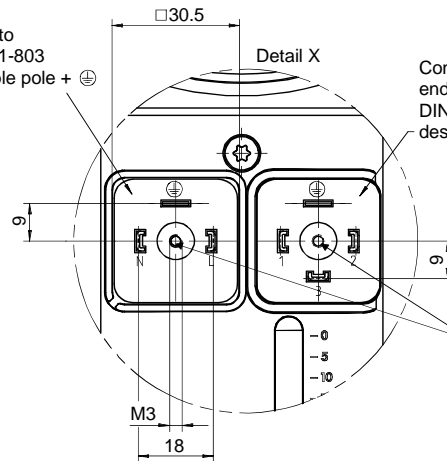
Dimensions (con't)

Dimensions in mm

SKP75...



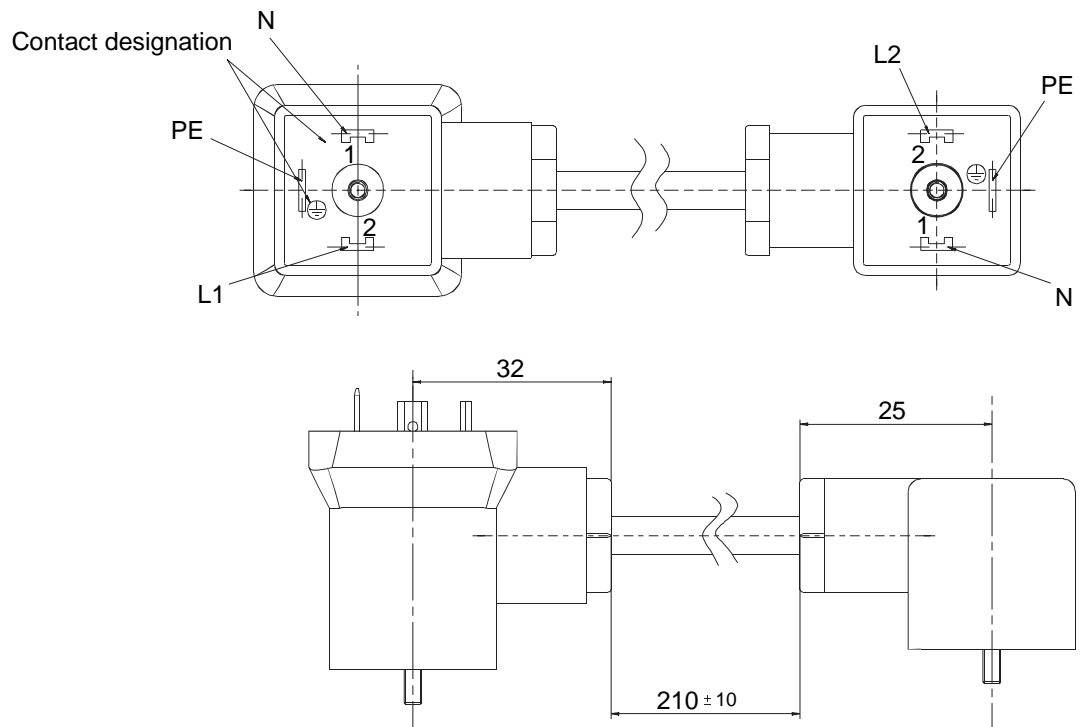
Connector for valve actuator to DIN EN 175301-803 design A, double pole + ⊕



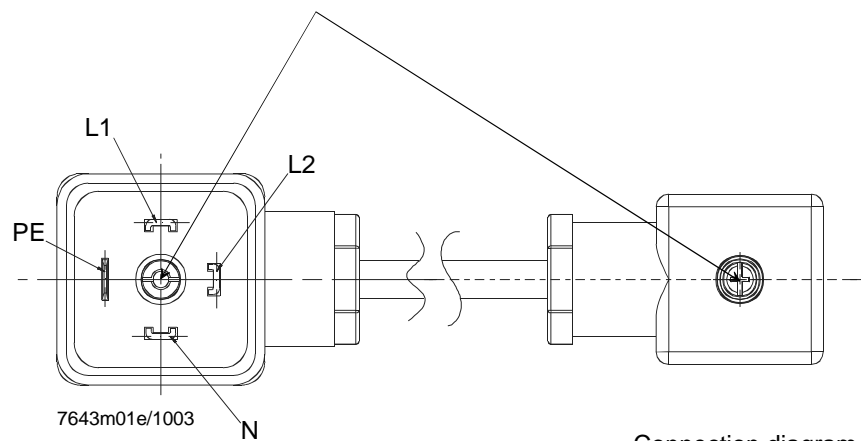
Dimensions (con't)

Dimensions in mm

Connecting cable
AGA62.000A000 for
two SKP...



Tightening torque
central fixing screw 0.4 Nm



Connection diagram

