

Product Catalogue

Actuators and Control Dampers

Sensors and Systems for Combustion Engineering



www.lamtec.de

Inhalt

■ General.	4
■ Information on variant numbers	4
■ Information regarding the direction of rotation of the actuators	4
■ Information on actuators with electronic control 4 ... 20 mA	5
■ Information about the new gas control valve 668M2400	6
■ Information about the shaft forms for actuator type 662R21...	7
■ Information about the shaft forms for actuator type 668M20...	8
■ Electric Actuators 6/20/40 Nm, Type 668M20...	9
■ Spare parts for CMS actuators Type 668M20...	12
■ Electric Actuator 6 Nm, Type 662R2127.	13
■ Electric Actuator 20 Nm, Type 662R2111.	18
■ Electric Actuator 30/40/50 Nm, Type 662R2112/662R2121/662R2122	23
■ Electric Actuators 90/140/180 Nm, Type 662R2123/662R2124/662R2125	27
■ ATEX/IECEx Actuator Type 662R2140 Die-cast aluminium and 662R2141stainless steel.	31
■ Lever arm coupling for actuators.	35
■ Ball joint for actuators.	37
■ Clamping lever for ball joint.	38
■ Coupling for actuators.	39
■ Cooling fin coupling with thermal separation.	41
■ Square hollow profile console Aluminium.	42
■ U-angle bracket sheet steel, galvanized.	43
■ Electrical connection to ETAMATIC.	44
■ Spare parts for actuator Typ 662R21...	45
■ Gas volume control dampers up to 60 °C 140°F, DVGW proofed, non linear Type 668M2300 Aluminium Type 668M2310 Stainless steel.	46
■ Gas volume control dampers up to 60 °C 140 °F, DVGW proofed, non linear from DN200 Type 662R23V.	51
■ Gas volume control dampers f. Biogas up to 60 °C 140 °F Stainless steel, DVGW proofed, non linear from DN200 Type 662R24V.	54

■ Control damper for flue gas / air, up to 100 °C 212 °F non-linear, without DVGW approval Type 668M2200 Aluminium.	57
■ Control damper for flue gas / air, up to 450 °C 842 °F non-linear, without DVGW approval Type 668M2205 Cast Iron.	60
■ Control damper for flue gas / air, up to 650 °C 1202 °F non-linear, without DVGW approval.	63
■ Control damper for flue gas / air, up to 450 °C 842°F non-linear, without DVGW approval from DN250 Type 662R22V.	68
■ Gas Control Valve Type SVL 668M2400.	71

General.

Information on variant numbers

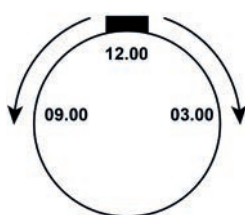
Actuators are revised with respect to variant numbers:

This results in an order code which consists of a purchase order number, the selection of attributes and includes all the selected options. Each attribute can have only one selection.

Description / Type																		
Order code																		
Order no.:	A05	A10	A15	A20	A25	A30	A35	A40	A45	A50	A55	A60	A65	A70	A75	A80	A85	
662 R 2127	BC1	2305	060	090	DPS	5K	0	HV1	54	ES2	ZS0	1R	S	S	1B	1S	SO0	
Attribute					Selection													Description
A05 FORM OF SHAFT					BC1													ROUND SHAFT 12x30 mm WITH PARALLEL KEY 4x4x14 mm
A10 POWER SUPPLY VOLTAGE					2305													AC230V/50 Hz
A15 RUNNING TIME TO 90°					060													60 SECONDS
A20 DISPLACEMENT					090													90°
A25 CONTROLLING					DPS													THREE-POINT-STEP
A30 POSITION FEEDBACK					5K													TÜV-POTENTIOMETER 5 KOHM, POSITIVE, FREE OF BACKLASH
A35 ADDITIONAL POSITION FEEDBACK					0													WITHOUT
A40 ELECTRICALLY HAND FEED					HV1													WITH
A45 CLASS OF PROTECTION					54													IP54
A50 END SWITCHES					ES2													2 END SWITCHES
A55 ADDITIONAL SWITCHES					ZS0													WITHOUT
A60 DIRECTION OF ROTATION					1R													RIGHT
A65 GEAR					S													STANDARD
A70 ADAPTION					S													STANDARD
A75 COLOR					1B													COVER BLUE
A80 CABLE GLANDS					1S													STANDARD
A85 SPECIAL CONFIGURATION					SO0													WITHOUT

Information regarding the direction of rotation of the actuators

The actuators are always delivered in „CLOSE“ position !



Rotation of the actuators to position OPEN:

At clockwise - actuators:

Looking towards the shaft from 12.00 o'clock to 03.00 o'clock (Clockwise).

For counterclockwise rotating actuators:

Counterclockwise rotation with a view of the shaft from position 12.00 in the direction of 09. clock.

General.

Information on actuators with electronic control 4 ... 20 mA

In order to comply with EN-12067, 4 ... 20 mA feedback signals cannot be used as failsafe independent position indication when actuators are installed as part of electronic burner control systems such as ETAMATIC, FMS or VMS.

Actuators supplied for use within these systems will only be delivered fitted with TÜV approved position feedback potentiometers, Potentiometer 5k Ohm (Conductive Plastic)ʼ.

During system planning the following points must be considered:

When used as part of FMS/VMS systems the position feedback for the corresponding control output must be configured to ‚POTENTIOMETER‘.

Channel 2 can only be used in combination with ETAMATIC S to control this type of actuator. In this case an additional continuous output for channel 2 via an LSB module (order no. 663R4029) and LSB connecting cable (order no. 663R0421N-2M) is necessary.

The setpoint for channel 2 (4...20mA signal) will be used to control the actuator position and the POTENTIOMETER feedback of channel 2 will be used for position feedback.

When ordering ETAMATIC (part no. 663R1) specify one of the following types at ‚Attribute 30 - Control Outputs/Position Feedback‘

- | | |
|------------|---|
| 004 | 2x THREE-POINT-STEP CONTROL OUTPUT and 2x CONTINUOUS OUTPUT
4...20 mA, FEEDBACK 4...20 mA |
| 031 | 2x THREE-POINT-STEP CONTROL OUTPUT and 2x CONTINUOUS OUTPUT
4...20 mA, FEEDBACK FOR 1st CONTINUOUS OUTPUT:
RPM, 2-WIRE-SYSTEM NAMUR, RANGE 300...3600 IMP/MIN |
| 31D | 2x THREE-POINT-STEP CONTROL OUTPUT and 2x CONTINUOUS OUTPUT
4...20 mA, FEEDBACK FOR 1st CONTINUOUS OUTPUT:
RPM, 3-WIRE-SYSTEM INDUCTIVE, RANGE 300...3600 IMP/MIN |

General.

Information about the new gas control valve 668M2400

From August 2023, new LAMTEC gas control valve 668M2400 with external square will be available. For mounting on a 668M20... actuator with internal square, separate mounting is no longer required. The new damper is simply plugged on and screwed on. Fastening screws are included in the delivery.

Type overview

668M2400 gas control valve SVL, Aluminium, up to max. +60 °C | 140 °F, DN08 ... DN50.

Shaft end with square 11.1x11.1x11.5 mm | 0.44x0.44x0.45" in

For screwing into the pipe. Connection range Rp or NPT 1/2"

Flow rate DN08 ... DN40 linear, DN50 roughly linear

Operating pressure: max. 500 mbar | 7.25 psi

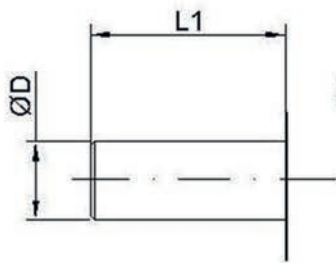
No separate coupling/console is required. The console is part of the damper.

Ambient/medium temperature: -20 ... +60 °C | -4 ... 140 °F

General.

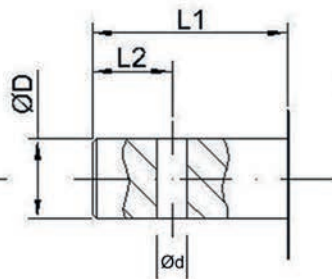
Information about the shaft forms for actuator type 662R21...

Form A



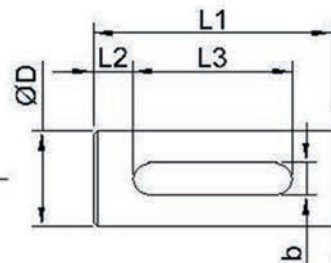
	ØD	L1
A01	10	25
A02	12	30
A03	12	36
A04	12	40
A05	12	50

Form B



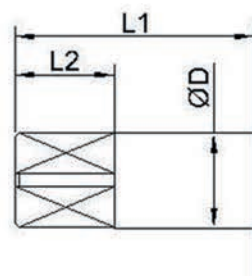
	ØD	Ød	L1	L2
B01	10	4	25	10
B02	12	4	30	10
B03	12	5	40	6

Form C

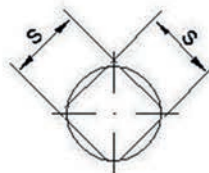


	ØD	L1	L2	L3	b
C01	12	25	5	14	4
C02	12	30	5	14	4
C03	12	30	5	20	4
C04	12	36	3	14	4
C05	12	40	5	16	4
C06	15	30	5	20	4
C07	15	40	5	25	5
C08	15	40	5	30	5
C09	20	50	5	30	6
C10	20	50	5	32	6

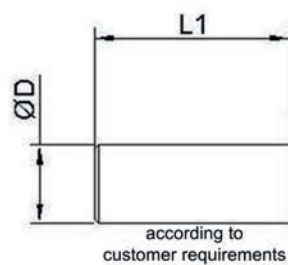
Form D



	ØD	L1	L2	s
D01	12	30	12,5	9,5





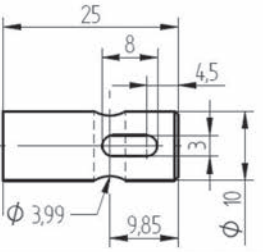

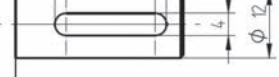
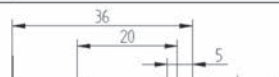
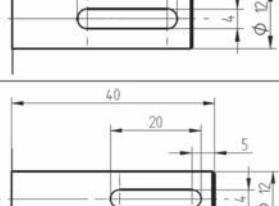
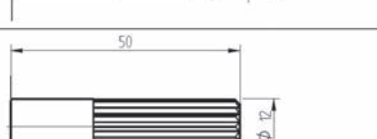
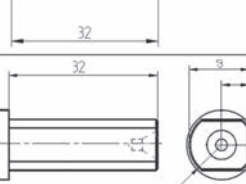
Form E



ØD	L1			

Information about the shaft forms

Information about the shaft forms for actuator type 668M20...

<p>Form of shaft (A10-IVK11) Internal square 11,1x11,1x11,5 mm</p>	 <p>11,1 x 11,1 (+0,1) x 11,5</p>
<p>Form of shaft (A10-VK11) Square 11x11x12,5x30 mm</p>	
<p>Form of shaft (A10-VK38x1) Square 3/8" x 1"</p>	
<p>Form of shaft (A10-10x25) Round 10x25 mm with parallel key 3x3x8 mm and cross drilling Only available for 6Nm and 20Nm</p>	
<p>Form of shaft (A10-12x30) Round 12x30 mm with parallel key 4x4x20 mm</p>	
<p>Form of shaft (A10-12x36) Round 12x36 mm with parallel key 4x4x20 mm</p>	
<p>Form of shaft (A10-12x40) Round 12x40 mm with parallel key 4x4x20 mm</p>	
<p>Form of shaft (A10- KVZD2) Round 12x50 mm with spline 10/12 in acc. to DIN5481</p>	
<p>Form of shaft (A10-Z11x40) 14x40 mm Two flat 11 mm with 14/13 mm D-shaft</p>	
<p>Form of shaft (A10-10x25V) 10x25 mm with cross pin 4x20 mm</p>	 <p>Cross pin DIN 9135 4 x 20</p>

Information about the shaft forms

Electric Actuators 6/20/40 Nm, Type 668M20...

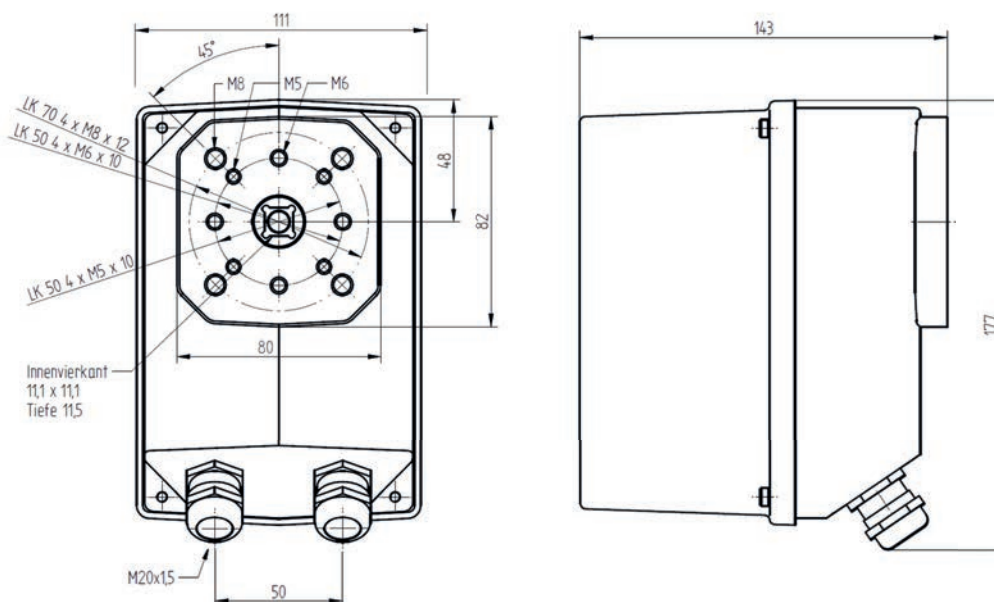
Technical Data



Actuators 6/20/40 Nm with round shaft and feather key

Usage	for driving dampers and valves on combustion equipment	Dimensions [mm]	see dimension drawing
Power supply voltage	230 VAC/50 Hz	Cable entry point	optionally 2x M16/M20/M25
Form of shaft	Internal square 11.1x11.1x11.5 mm 0.44x0.44x0.45" in	Weight	2.3 kg 5.07 lb
Running time [90°]	60 sec.	Protection class	IP65
Torque	6/20/40 NM	Flange mounting according to ISO 5211	F05/F07
Controlling	Three Point Step	Ambient temperature	-10 ... +60 °C 14 ... 140 °F
End switches	2	TÜV approval	when used with CMS
Additional switches	none		

Illustrations and technical data refer to the standard version



Dimension drawing actuator, Type 668M20... (all dimensions in mm)

Ordering Information

Description / Type (standard variant)	Order no.
Electric actuator TPS06, 6 Nm, TPS, position feedback potentiometer 5 kOhm, conductive plastic, 2 end switches, electric hand feed, protection class IP65	668M2006 - ...
Electric actuator TPS20, 20 Nm, TPS, position feedback potentiometer 5 kOhm, conductive plastic, 2 end switches, electric hand feed, protection class IP65	668M2020 - ...
Electric actuator TPS30, 40 Nm, TPS, position feedback potentiometer 5 kOhm, conductive plastic, 2 end switches, electric hand feed, protection class IP65	668M2040 - ...
A 03 – TORQUE	Selection
6 NM	006
20 NM	020
40 NM	040
6 NM, APPROVAL FOR EX-ZONE 2, Ex nR IIB T6 Gc	6NMEX2
20 NM, APPROVAL FOR EX-ZONE 2, Ex nR IIB T6 Gc	20NMEX2
40 NM, APPROVAL FOR EX-ZONE 2, Ex nR IIB T6 Gc	40NMEX2
A 10 – FORM OF OUTPUT SHAFT	Selection
INTERNAL SQUARE 11.1x11.1 mm 0.44x0.44" in	IVK11*
SQUARE SHAFT 11x11 mm 0.43x0.43" in	VK11
SQUARE SHAFT 3/8" x 1"	VK38x1
ROUND SHAFT 10x25 mm 0.39x 0.98" in WITH FEATHER KEY 3x3x8 mm 0.12x0.12x0.31" in (Only available for 6 Nm and 20 Nm)	10x25
ROUND SHAFT 12x30 mm 0.47x1.18" in WITH FEATHER KEY 4x4x20 mm 0.16x0.16x0.79" in	12x30
ROUND SHAFT 12x36 mm 0.47x1.42" in WITH FEATHER KEY 4x4x20 mm 0.16x0.16x0.79" in	12x36
ROUND SHAFT 12x40 mm 0.47x1.57" in WITH FEATHER KEY 4x4x20 mm 0.16x0.16x0.79" in	12x40
ROUND SHAFT 12x50mm , 0.47x1.97" in SERRATION 10/12, IN ACC. TO DIN5481	KVZD2
14x50 mm 0.55x1.97" in TWO FLAT 11 mm 0.43" in WITH 14/13 D-SHAFT	Z11x40
ROUND SHAFT 10x25 mm 0.39x 0.98" in WITH CROSS PIN 4x20 mm 0.16x0.79" in	10x25V
A 15 "POWER SUPPLY VOLTAGE"	Selection
120 VAC/50 Hz	120VAC
230 VAC/50 Hz	230VAC*
A 20 "RUNNING TIME / ANGULAR DISPLACEMENT"	Selection
60 SECONDS / 90° (60 SEC./50 HZ / 48 SEC./60 HZ)	6090 *
90 SECONDS / 135° (90 SEC./50 HZ / 72 SEC./60 HZ)	90135
120 SECONDS / 180° (120 SEC./50 HZ / 96 SEC./60 HZ)	120180
A 25 "POSITION FEEDBACK"	Selection
1x POTENTIOMETER 5 KOHMS, CONTELEC CONDUCTIVE PLASTIC, APPROVED IN ACCORDANCE TO EN12067-2, FORM CLOSURE CONSTRUCTION, BACKLASH-FREE, FOR POSITION FEEDBACK TO CMS	1PO*
2x POTENTIOMETER 5 KOHMS, CONTELEC CONDUCTIVE PLASTIC, APPROVED IN ACCORDANCE TO EN12067-2, FORM CLOSURE CONSTRUCTION, BACKLASH-FREE, FOR POSITION FEEDBACK TO CMS	2PO
POTENTIOMETER 5 KOHM NOVOTEC CONDUCTIVE PLASTIC, APPROVED IN ACCORDANCE TO EN12067-2, FORM CLOSURE CONSTRUCTION, BACKLASH-FREE, FOR POSITION FEEDBACK TO CMS/ETAMATIC/FMS/VMS	1NOVO

*Default settings

Ordering Information

A 30 "DIRECTION OF ROTATION" (view onto the shaft, feather key at 12.00 o'clock)	Selection
CLOCKWISE (12.00 TO 3.00 O'CLOCK)	R*
ANTI CLOCKWISE (12.00 UHR NACH 9.00 UHR)	L
A 40 "ADAPTION"	Selection
FLANGE FIXINIG IN ACCORDANCE TO ISO5211 F05 Ø50 4x45° M5 / 4x45° M6 F07 Ø70 4x90° M8	F05F07*
FLANGE FIXINIG 4x M6, 65 X 50 MM 2.56 x 1.97" in	65x50
FLANGE FIXINIG Ø52 mm 2x M5 Ø2.05" in 2x M5	LK52
FLANGE FIXINIG Ø68 mm 3x M6 Ø2.68" in 3x M6	LK68
FLANGE FIXINIG Ø80 mm 8x45° M10 Ø3.15" in 8x45° M10	LK80
ADAPTION IN ACCORDANCE TO CUSTOMER SPECIFICATION	
A 45 "COLOR"	Selection
HOUSING COVER RED RAL3020	RT*
HOUSING COVER BLACK RAL9006	SW
OTHER COLOURS ON REQUEST	
A 50 "CUSTOMER"	Selection
LAMTEC TYPE	S*
A 55 "POSITION INDICATOR"	Selection
WITHOUT	POS0*
POSITION INDICATOR IN HOUSING COVER	POS1
A 60 "HOUSING HEATING"	Selection
WITHOUT	HEAT0*
HOUSING HEATING 230V/12W, incl. THERMOSTAT, TO -30 °C -22 °F	HEAT1
HOUSING HEATING 120V/12W, incl. THERMOSTAT, TO -30 °C -22 °F	HEAT2
A 70 "CABLE ENTRY"	Selection
2x CABLE GLAND M16 METAL	M16
2x CABLE GLAND M20 METAL	M20*
2x CABLE GLAND M20 PLASTIC BLACK	M20KS
2x CABLE GLAND M25 METAL	M25
CONDUIT ADAPTER 2x " NPT	NPT12
CABLE GLAND IN ACCORDANCE TO CUSTOMER SPECIFICATION	

*Default settings

Spare parts for CMS actuators Type 668M20...

Ordering Information

Description / Type	Order no.
POTENTIOMETER CONTELEC WAL300, 5 kOhm 190° internal D-shaft, connection cable 120 mm 4.72" in with wire end ferrules	668E2001
POTENTIOMETER NOVOTEC SP2841, 5 kOhm 100° with parallel key	668P2002

Electric Actuator 6 Nm, Type 662R2127.

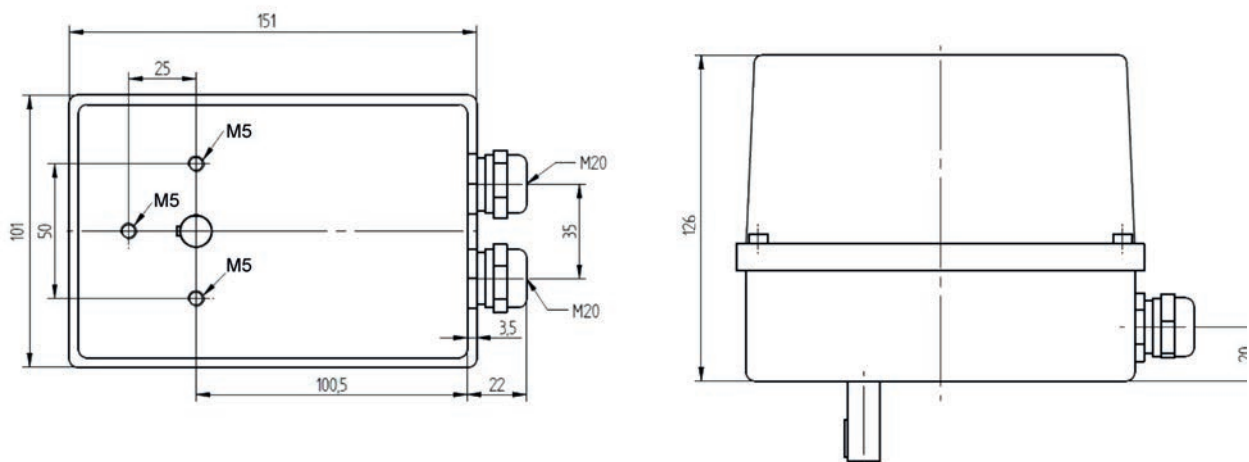
Technical Data



Actuator 6 Nm

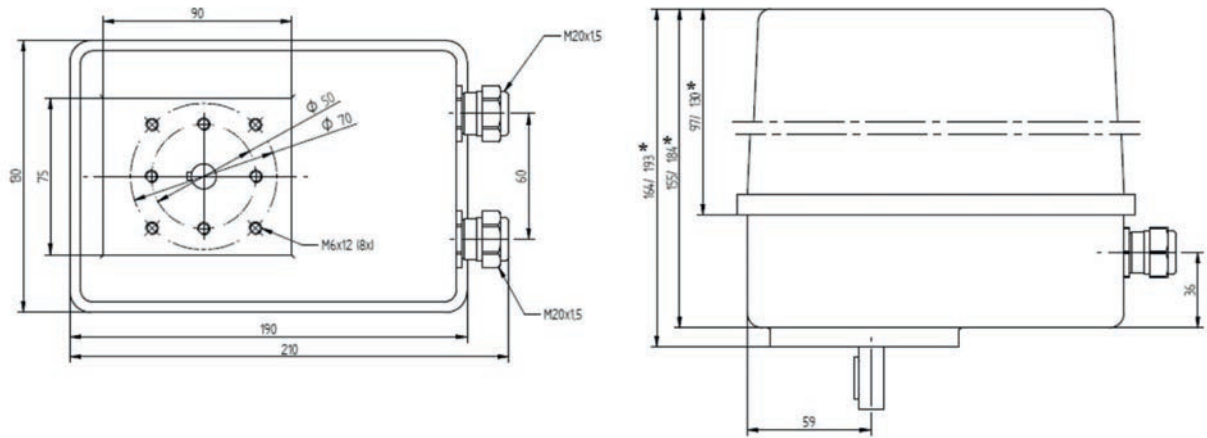
Usage	for driving dampers and valves on combustion equipment	Dimensions [mm]	see dimension drawing
Power supply voltage	230 VAC/50 Hz	Screwed cable glands	2x M20x1,5, cabel Ø min. 8.0 mm, max. 13.0 mm Ø min. 0.31, max. 0.51" in
Form of shaft	Ø10x25 0.39x0.98" in, Form BC1 with cross hole 4 mm 0.16" in and feather key 3x3x8 mm 0.12x0.12x0.31" in	Weight	1.7 kg 3.75 lb
		Protection class	IP65 with metal cover
Running time [90°]	60 sec.	Adaption	2x M5, screw-hole circle Ø 50 mm Ø 1.97" in
Controlling	Three Point Step		
End switches	2	Ambient temperature	-10 ... +60 °C 14 ... 140 °F
Additional switches	none	TÜV approval	when used with VMS/FMS/ETAMATIC

Illustrations and technical data refer to the standard version



Dimension drawing Actuator 6Nm, type 662R2127 (all dimensions in mm)

Electric Actuators 6 Nm to 180 Nm for ETAMATIC/FMS/VMS



Dimensional drawing of Actuator with electronic control (all dimensions in mm)

**The construction height depends on the equipment*

Ordering Information

Description / Type (standard variant)	Order no.
Actuator 6 Nm, in the following variant	662R2127 - ...
A 03 - TORQUE	Selection
6 NM	006
A 05 - FORM OF SHAFT	Selection
ROUND SHAFT 10x25 mm 0.39x0.98" in WITH FEATHER KEY 3x3x8 mm 0.12x0.12x0.31" in and 4 mm 0.16" in CROSS HOLE, Standard	BC1*
ROUND SHAFT 12x30 mm 0.47x1.18" in WITH FEATHER KEY 4x4x14 mm 0.16x0.16x0.55" in	CO2
FURTHER SHAFTS ON REQUEST	
A 10 - POWER SUPPLY VOLTAGE	Selection
POWER SUPPLY VOLTAGE 115 VAC/50 Hz	1155
POWER SUPPLY VOLTAGE 115 VAC/60 Hz	1156
POWER SUPPLY VOLTAGE 230 VAC/50 Hz	2305*
POWER SUPPLY VOLTAGE 230 VAC/60 Hz	2306
A 15 - RUNNING TIME TO 90°	Selection
30 SECONDS	30
40 SECONDS	40
60 SECONDS	60*
FURTHER RUNNING TIMES ON REQUEST	—
A 20 - ANGULAR DISPLACEMENT	Selection
DISPLACEMENT 90°	090*
DISPLACEMENT 120°	120
DISPLACEMENT 135°	135
DISPLACEMENT 180°	180
DISPLACEMENT 270°	270
A 25 - CONTROLLING	Selection
THREE-POINT-STEP POSITION FEEDBACK „POTENTIOMETER USE“	DPS*
ELECTRONIC CONTROLLING 4 ... 20 mA POSITION FEEDBACK „4 ... 20 mA“, additional position feedback “POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved”	REG

*Default settings

Ordering Information

A 30 - POSITION FEEDBACK	Selection
POTENTIOMETER 100 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	1K
POTENTIOMETER 200 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved, POSITIVE LOCKING, FREE OF BACKLASH, only possible with THREE-POINT-STEP-CONTROLLING	5K*
4 ... 20 mA Standard at ELECTRONIC CONTROLLING 4 ... 20 mA Caution: position feedback at ETAMATIC/FMS/VMS not failsafe, use additional position feedback "POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved" !	REG
A 35 - ADDITIONAL POSITION FEEDBACK	Selection
WITHOUT ADDITIONAL POSITION FEEDBACK	0*
POTENTIOMETER 100 OHM (WIRE-WOUND)	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND)	1K
POTENTIOMETER 200 OHM (WIRE-WOUND)	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved Mandatory for failsafe position feedback indication when using electronic control !	5K
A 40 - ELECTRICAL OVERRIDE, selection not possible Control „DPS“ only available with electrical manual override Control „4 ... 20 mA“ only available without electrical manual override	
WITHOUT	HV0
WITH	HV1
A 45 - IP PROTECTION CLASS	Selection
IP65 WITH METAL COVER	65*
A 50 - END SWITCHES	Selection
2 END SWITCHES	ES2*
2 END SWITCHES GASTIGHT	ESG
A 55 - ADDITIONAL SWITCHES	Selection
WITHOUT ADDITIONAL SWITCHES	ZS0*
1 ADDITIONAL SWITCH	ZS1
1 ADDITIONAL SWITCH GASTIGHT	ZG1
A 60 - DIRECTION OF ROTATION“ (view to the shaft feather key on 12.00 o'clock)	Selection
DIRECTION OF ROTATION TO THE RIGHT (12.00 o'clock to 3.00 o'clock ,clockwise')	1R*
DIRECTION OF ROTATION TO THE LEFT (12.00 o'clock to 9.00 o'clock ,anti-clockwise')	2L
A 65 - GEAR	Selection
STANDARD	S*
GEAR FOR INCREASED TEMPERATURE 80 °C 176 °F	W

*Default settings

Ordering Information

A 70 - ADAPTION	Selection
3x M5, HOLE CIRCLE Ø 50 mm 1.97" in	S*
BY TYPE	T / U / W
BY DRAWING	ZG
FURTHER ADAPTATIONS ON REQUEST	—
A 75 - COLOUR	Selection
HOUSING COVER METAL RAL5010, BLUE, POWDER-COATED	1B*
HOUSING COVER METAL RAL7016, ANTHRACITE	2S
A 80 - CABLE GLANDS	Selection
2x M20 METAL	1S*
FURTHER CABLE GLANDS ON REQUEST	—
A 85 - SPECIAL CONFIGURATION	Selection
WITHOUT	S00*
HOUSING HEATING 15 W, incl. THERMOSTAT, down to -30 °C -22°F	S02

*Default settings

Electric Actuator 20 Nm, Type 662R2111.

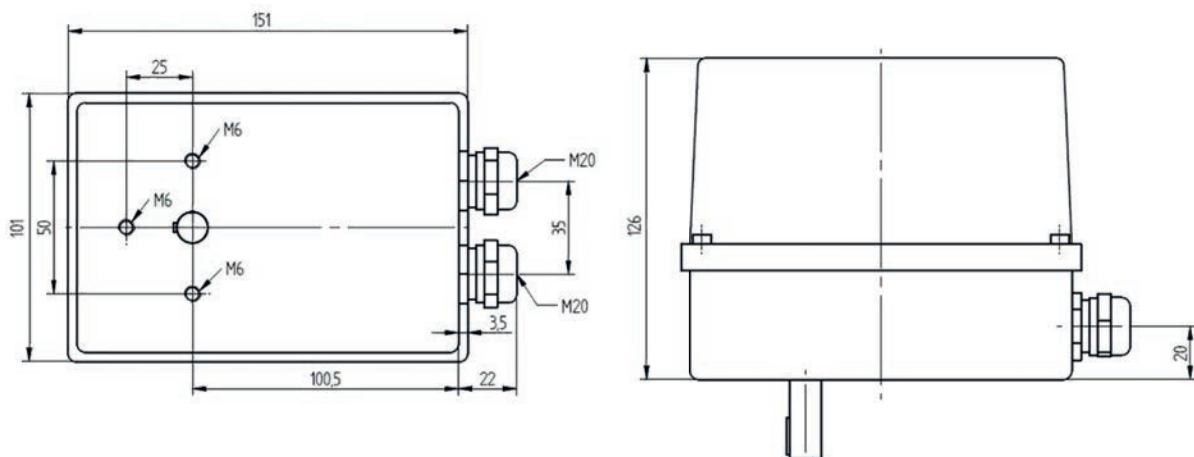
Technical Data



Actuator 20 Nm

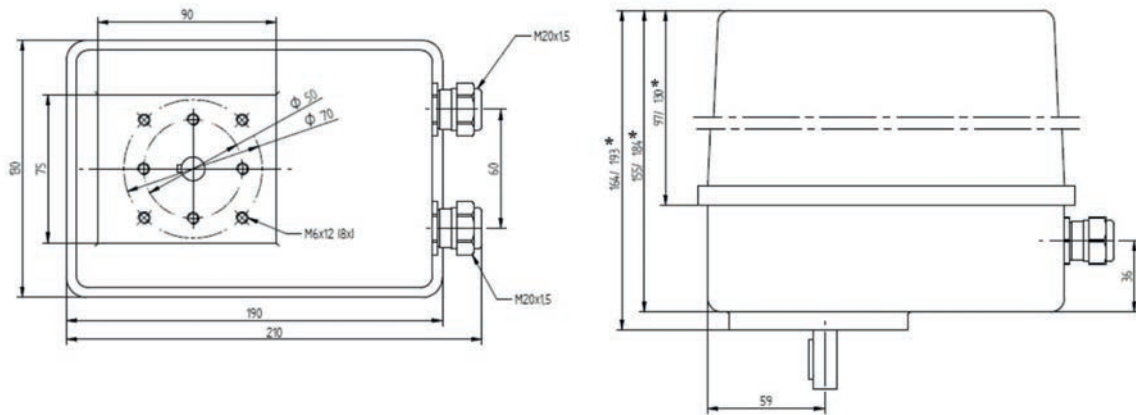
Usage	for driving dampers and valves on combustion equipment	Dimensions [mm]	see dimension drawing
Power supply voltage	230 VAC/50 Hz	Screwed cable glands	2x M20x1,5, cable Ø min. 8.0 mm, max. 13.0 mm Ø min. 0.31" in, max. 0.51" in
Form of shaft	Ø12x30 mm 0.47x1.18" in, Form C02	Weight	1.7 kg 3.75 lb
Running time [90°]	60 sec.	Protection class	IP65 with metal cover
Controlling	DPS	Adaption	3x M6, screw-hole circle Ø 50 mm Ø 1.97" in
End switches	2	Ambient temperature	-10 ... +60 °C 14 ... 140 °F
Additional switches	1	TÜV approval	when used with VMS/FMS/ETAMATIC

Illustrations and technical data refer to the standard version



Dimension drawing Actuator 20 Nm type 662R2111 IP65 with metal cover (all dimensions in mm)

Electric Actuators 6 Nm to 180 Nm for ETAMATIC/FMS/VMS



Dimensional drawing of Actuator with electronic control (all dimensions in mm)

**The construction height depends on the equipment*

Ordering Information

Description / Type (standard variant)	Order no.
Actuator 20 Nm in the following variant	662R2111 - ...
1) Coupling or lever must be ordered separately	
A 03 – TORQUET	Selection
20 Nm	020
A 05 – FORM OF SHAFT	Selection
ROUND SHAFT 12x30 mm 0.47x1.18" in WITH FEATHER KEY 4x4x14 mm 0.16x0.16x0.55	C02*
FURTHER SHAFTS ON REQUEST	—
A 10 – POWER SUPPLY VOLTAGE	Selection
POWER SUPPLY VOLTAGE 115 VAC/50 Hz	1155
POWER SUPPLY VOLTAGE 115 VAC/60 Hz	1156
POWER SUPPLY VOLTAGE 230 VAC/50 Hz	2305*
POWER SUPPLY VOLTAGE 230 VAC/60 Hz	2306
A 15 – RUNNING TIME TO 90°	Selection
60 SECONDS	60*
30 SECONDS	30
40 SECONDS	40
FURTHER RUNNING TIMES ON REQUEST	—
A 20 – ANGULAR DISPLACEMENT	Selection
DISPLACEMENT 90°	090*
DISPLACEMENT 120°	120
DISPLACEMENT 135°	135
DISPLACEMENT 180°	180
DISPLACEMENT 270°	270
A 25 – CONTROLLING	Selection
THREE-POINT-STEP POSITION FEEDBACK „POTENTIOMETER USE“	DPS*
ELECTRONIC CONTROLLING 4 ... 20 mA POSITION FEEDBACK „4 ... 20 mA“, additional position feedback “POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved”	REG

*Default settings

Ordering Information

A 30 – POSITION FEEDBACK	Selection
POTENTIOMETER 100 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	1K
POTENTIOMETER 200 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved, POSITIVE LOCKING, FREE OF BACKLASH, only possible with THREE-POINT-STEP-CONTROLLING	5K*
4 ... 20 mA Standard at ELECTRONIC CONTROLLING 4 ... 20 mA Caution: position feedback at ETAMATIC/FMS/VMS not failsafe, use additional position feedback "POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved" !	REG
A 35 – ADDITIONAL POSITION FEEDBACK	Selection
WITHOUT ADDITIONAL POSITION FEEDBACK	0*
POTENTIOMETER 100 OHM (WIRE-WOUND)	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND)	1K
POTENTIOMETER 200 OHM (WIRE-WOUND)	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved Mandatory for failsafe position feedback indication when using electronic control !	5K
A 40 – ELECTRICAL OVERRIDE, selection not possible Control „DPS“ only available with electrical manual override Control „4 ... 20 mA“ only available without electrical manual override	
WITHOUT	HV0
WITH	HV1
A 45 – IP PROTECTION CLASS	Selection
IP65 WITH METAL COVER	65*
A 50 – END SWITCHES	Selection
2 END SWITCHES	ES2*
2 END SWITCHES GASTIGHT	ESG
A 55 – ADDITIONAL SWITCHES	Selection
WITHOUT ADDITIONAL SWITCHES	ZS0
1 ADDITIONAL SWITCH	ZS1*
2 ADDITIONAL SWITCHES	ZS2
3 ADDITIONAL SWITCHES	ZS3
4 ADDITIONAL SWITCHES	ZS4
1 ADDITIONAL SWITCH GASTIGHT	ZG1
2 ADDITIONAL SWITCHES GASTIGHT	ZG2
3 ADDITIONAL SWITCHES GASTIGHT	ZG3
4 ADDITIONAL SWITCHES GASTIGHT	ZG4

*Default settings

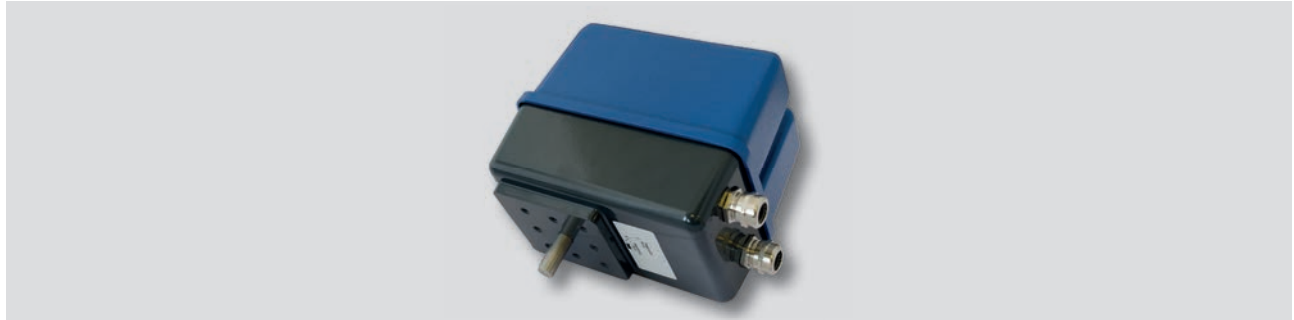
Ordering Information

A 60 - DIRECTION OF ROTATION* (view to the shaft feather key on 12.00 o'clock)	Selection
DIRECTION OF ROTATION TO THE RIGHT (12.00 o'clock to 3.00 o'clock , clockwise)	1R*
DIRECTION OF ROTATION TO THE LEFT (12.00 o'clock to 9.00 o'clock , anti-clockwise)	2L
A 65 - GEAR	Selection
STANDARD	S*
GEAR FOR INCREASED TEMPERATURE 80 °C 176 °F	W
A 70 - ADAPTION	Selection
3x M6, HOLE CIRCLE Ø 50 mm 1.97" in	S*
BY TYPE	T / U / W
BY DRAWING	ZG
FURTHER ADAPTATIONS ON REQUEST	—
A 75 -COLOUR	Selection
HOUSING COVER METAL RAL5010, BLUE, POWDER-COATED	1B*
HOUSING COVER METAL RAL7016, ANTHRACITE	2S
A 80 -CABLE GLANDS	Selection
2x M20 METAL	1S*
FURTHER CABLE GLANDS ON REQUEST	—
A 85 -SPECIAL CONFIGURATION	Selection
WITHOUT	S00*
HOUSING HEATING 15 W, incl. THERMOSTAT, down to -30 °C -22 °F	S02

*Default settings

Electric Actuator 30/40/50 Nm, Type 662R2112/662R2121/662R2122

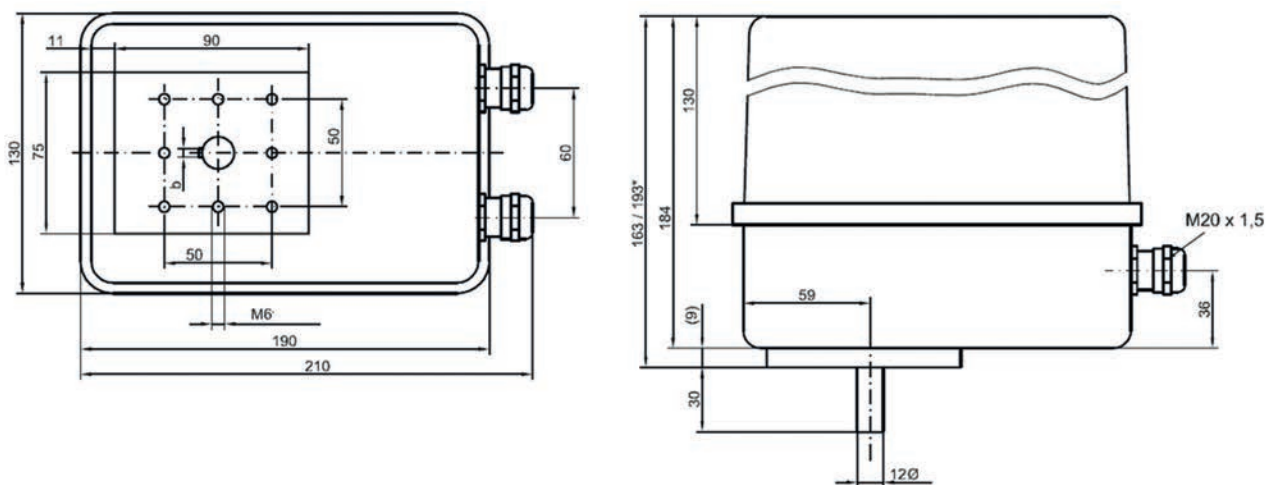
Technical Data



Actuator 30/40/50 Nm

Usage	for driving dampers and valves on combustion equipment	Dimensions [mm]	see dimension drawing
Power supply voltage	230 VAC/50 Hz	Screwed cable glands	2x M20x1,5, cabel Ø min. 8,0 mm, max. 13,0 mm min. 0.31, max. 0.51" in
Form of shaft	Ø12x30 0.47x1.18" in, Form C02	Weigth	2,5 kg 5,51 lb
Running time [90°]	60 sec.	Protection class	IP65 with metal cover
Controlling	Three Point Step	Adaption	8 x 90°, M6, screw-hole circle Ø 50 mm 1,97" in
End switches	2	Ambient temperature	-10 ... +60 °C 14 ... 140 °F
Additional switches	2	TÜV approval	when used with VMS/FMS/ETAMATIC

Illustrations and technical data refer to the standard version



Dimension drawing actuator 30 NM 40 NM 50 NM (all dimensions in mm)

Ordering Information

Description / Type (standard variant)	Order no.
Actuator 30 Nm, in the following variants Actuator 40 Nm Actuator 50 Nm	662R2112 - ... 662R2121 - ... 662R2122 - ...
1) Coupling or lever must be ordered separately	
A 03 - TORQUE	Selection
30 Nm	030
40 Nm	040
50 Nm	050
A 05 - FORM OF SHAFT	Selection
ROUND SHAFT 12x30 mm 0.47x1.18" in WITH FEATHER KEY 4x4x20 mm 0.16x0.16x0.79" in when CLASS OF PROTECTION IP65	C03*
FURTHER SHAFTS ON REQUEST	—
A 10 - POWER SUPPLY VOLTAGE	Selection
POWER SUPPLY VOLTAGE 115 VAC/50 Hz	1155
POWER SUPPLY VOLTAGE 115 VAC/60 Hz	1156
POWER SUPPLY VOLTAGE 230 VAC/50 Hz	2305*
POWER SUPPLY VOLTAGE 230 VAC/60 Hz	2306
A 15 - RUNNING TIME TO 90°	Selection
30 SECONDS	30
40 SECONDS	40
60 SECONDS	60*
FURTHER RUNNING TIMES ON REQUEST	—
A 20 - ANGULAR DISPLACEMENT	Selection
DISPLACEMENT 90°	090*
DISPLACEMENT 120°	120
DISPLACEMENT 135°	135
DISPLACEMENT 180°	180
DISPLACEMENT 270°	270
A 25 - CONTROLLING	Selection
THREE-POINT-STEP POSITION FEEDBACK „POTENTIOMETER USE“	DPS*
ELECTRONIC CONTROLLING 4 ... 20 mA POSITION FEEDBACK „4 ... 20 mA“, additional position feedback “POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved”	REG

*Default settings

Ordering Information

A 30 – POSITION FEEDBACK	Selection
POTENTIOMETER 100 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	1K
POTENTIOMETER 200 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved, POSITIVE LOCKING, FREE OF BACKLASH, only possible with THREE-POINT-STEP-CONTROLLING	5K*
4 ... 20 mA Standard at ELECTRONIC CONTROLLING 4 ... 20 mA Caution: position feedback at ETAMATIC/FMS/VMS not failsafe, use additional position feedback “POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved” !	REG
A 35 – ADDITIONAL POSITION FEEDBACK	Selection
WITHOUT ADDITIONAL POSITION FEEDBACK	0*
POTENTIOMETER 100 OHM (WIRE-WOUND)	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND)	1K
POTENTIOMETER 200 OHM (WIRE-WOUND)	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved Mandatory for failsafe position feedback indication when using electronic control !	5K
A 40 – ELECTRICAL OVERRIDE, selection not possible Control „DPS“ only available with electrical manual override Control „4 ... 20 mA“ only available without electrical manual override	Selection
WITHOUT	HV0
WITH	HV1
A 45 – IP PROTECTION CLASS	Selection
IP65	65*
A 50 – END SWITCHES	Selection
2 END SWITCHES	ES2*
2 END SWITCHES GASTIGHT	ESG
A 55 – ADDITIONAL SWITCHES	Selection
WITHOUT ADDITIONAL SWITCHES	ZS0
1 ADDITIONAL SWITCH	ZS1
2 ADDITIONAL SWITCHES	ZS2*
3 ADDITIONAL SWITCHES	ZS3
4 ADDITIONAL SWITCHES	ZS4
1 ADDITIONAL SWITCH GASTIGHT	ZG1
2 ADDITIONAL SWITCHES GASTIGHT	ZG2
3 ADDITIONAL SWITCHES GASTIGHT	ZG3
4 ADDITIONAL SWITCHES GASTIGHT	ZG4

*Default settings

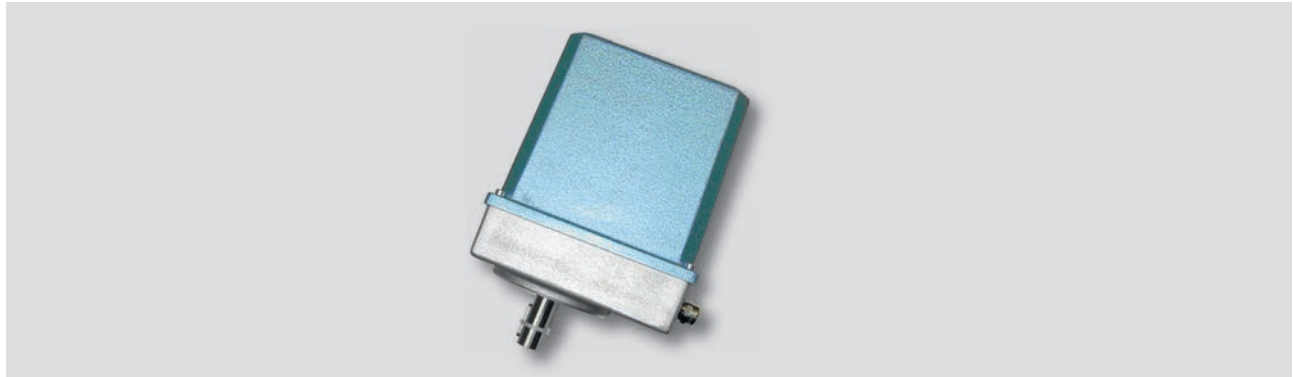
Ordering Information

A 60 – DIRECTION OF ROTATION (view to the shaft feather key on 12.00 o'clock)	Selection
DIRECTION OF ROTATION TO THE RIGHT (12.00 o'clock to 3.00 o'clock , clockwise ¹)	1R*
DIRECTION OF ROTATION TO THE LEFT (12.00 o'clock to 9.00 o'clock , anti-clockwise ¹)	2L
A 65 – GEAR	Selection
STANDARD	S*
GEAR FOR INCREASED TEMPERATURE 80 °C (only possible with IP65 PROTECTION CLASS)	W
A 70 – ADAPTION	Selection
4x M6, HOLE CIRCLE Ø 50 mm 1.97" in	S*
BY TYPE	T / U / W
BY DRAWING	ZG
FURTHER ADAPTATIONS ON REQUEST	–
A 75 – COLOUR	Selection
HOUSING COVER METAL RAL5010, BLUE, POWDER-COATED	1B*
HOUSING COVER METAL RAL7016, ANTHRACITE	2S
A 80 – CABLE GLANDS	Selection
2x M20 when IP65	1S*
FURTHER CABLE GLANDS ON REQUEST	–
A 85 – SPECIAL CONFIGURATION	Selection
WITHOUT SPECIAL CONFIGURATION	S00*
HOUSING HEATING 15 W, incl. THERMOSTAT, down to -30 °C -22 °F	S02

¹Default settings

Electric Actuators 90/140/180 Nm, Type 662R2123/662R2124/662R2125

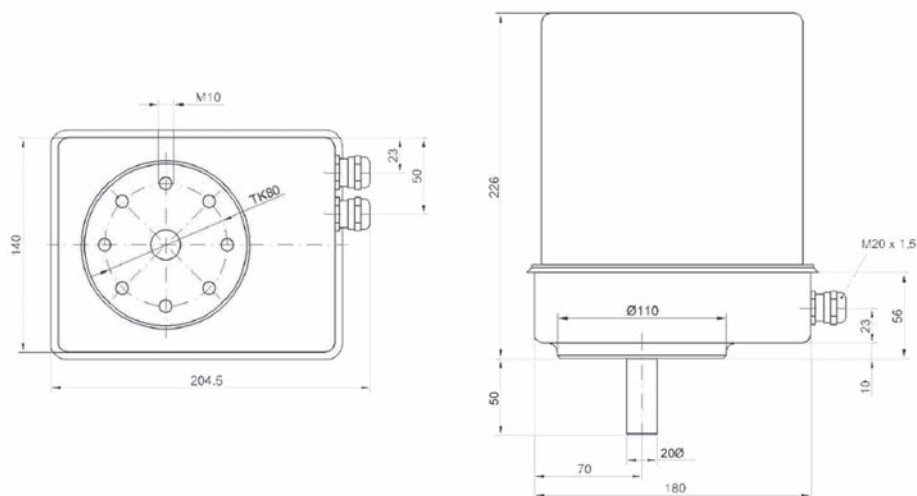
Technical Data



Actuator 90-180 Nm

Usage	for driving dampers and valves on combustion equipment	Dimensions [mm]	see dimension drawing
Power supply voltage	230 VAC/50 Hz	Screwed cable glands	2x M20x1.5, cable Ø min. 8.0 mm, max. 13.0 mm min. 0.31, max. 0.51" in
Form of shaft	Ø20x50 0.79x1.97" in, Form C10	Weight	7 kg 15,43 lb
Running time [90°]	60 sec.	Protection class	IP65
Controlling	Three Point Step	Adaption	4 x 45°, M10, screw-hole circle Ø 80 mm 3.15" in
End switches	2	Ambient temperature	-10 ... + 60 °C 14 ... 140 °F
Additional switches	2	TÜV approval	when used with VMS/FMS/ETAMATIC

Illustrations and technical data refer to the standard version



Dimension drawing Actuator 90-180 Nm Type 662R2123/24/25 IP65 (all dimensions in mm)

Ordering Information

Description / Type (standard variant)	Order no.
Actuator 90 Nm, in the following variants	662R2123 - ...
Actuator 140 Nm	662R2124 - ...
Actuator 180 Nm	662R2125 - ...
¹⁾ Coupling or lever must be ordered separately	
A 03 - TORQUE	Selection
90 Nm	090
140 Nm	140
180 Nm	180
A 05 - FORM OF SHAFT	Selection
ROUND SHAFT 20x50 mm 0.79x1.97" in WITH FEATHER KEY 6x6x32 mm 0.24x0.24x1.26" in	C10*
FURTHER SHAFTS ON REQUEST	—
A 10 - POWER SUPPLY VOLTAGE	Selection
POWER SUPPLY VOLTAGE 115 VAC/50 Hz	1155
POWER SUPPLY VOLTAGE 115 VAC/60 Hz	1156
POWER SUPPLY VOLTAGE 230 VAC/50 Hz	2305*
POWER SUPPLY VOLTAGE 230 VAC/60 Hz	2306
A 15 - RUNNING TIME TO 90°	Selection
30 SECONDS	30
40 SECONDS	40*
60 SECONDS	60*
FURTHER RUNNING TIMES ON REQUEST	—
A 20 - ANGULAR DISPLACEMENT	Selection
DISPLACEMENT 90°	090*
DISPLACEMENT 120°	120
DISPLACEMENT 135°	135
DISPLACEMENT 180°	180
DISPLACEMENT 270°	270
A 25 - CONTROLLING	Selection
THREE-POINT-STEP POSITION FEEDBACK „POTENTIOMETER USE“	DPS*
ELECTRONIC CONTROLLING 4 ... 20 mA POSITION FEEDBACK „4 ... 20 mA“, additional position feedback “POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved”	REG

*Default settings

Ordering Information

A 30 - POSITION FEEDBACK	Selection
POTENTIOMETER 100 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	1K
POTENTIOMETER 200 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved, POSITIVE LOCKING, FREE OF BACKLASH, only possible with THREE-POINT-STEP-CONTROLLING	5K*
4 ... 20 mA Standard at ELECTRONIC CONTROLLING 4 ... 20 mA Caution: position feedback at ETAMATIC/FMS/VMS not failsafe, use additional position feedback "POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved" !	REG
A 35 - ADDITIONAL POSITION FEEDBACK	Selection
WITHOUT ADDITIONAL POSITION FEEDBACK	0*
POTENTIOMETER 100 OHM (WIRE-WOUND)	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND)	1K
POTENTIOMETER 200 OHM (WIRE-WOUND)	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved Mandatory for failsafe position feedback indication when using electronic control!	5K
A 40 - ELECTRICAL OVERRIDE, selection not possible, CONTROLLING TPS delivery only with ELECTRICAL OVERRIDE CONTROLLING 4 ... 20 mA delivery only without ELECTRICAL OVERRIDE	
WITHOUT	HV0
WITH	HV1
A 45 - IP PROTECTION CLASS, selection not possible, delivery only in IP65	
IP65	65
A 50 - END SWITCHES	Selection
2 END SWITCHES	ES2*
2 END SWITCHES GASTIGHT	ESG
A 55 - ADDITIONAL SWITCHES	Selection
WITHOUT ADDITIONAL SWITCHES	ZS0
1 ADDITIONAL SWITCH	ZS1
2 ADDITIONAL SWITCHES	ZS2*
3 ADDITIONAL SWITCHES	ZS3
4 ADDITIONAL SWITCHES	ZS4
1 ADDITIONAL SWITCH GASTIGHT	ZG1
2 ADDITIONAL SWITCHES GASTIGHT	ZG2
3 ADDITIONAL SWITCHES GASTIGHT	ZG3
4 ADDITIONAL SWITCHES GASTIGHT	ZG4

*Default settings

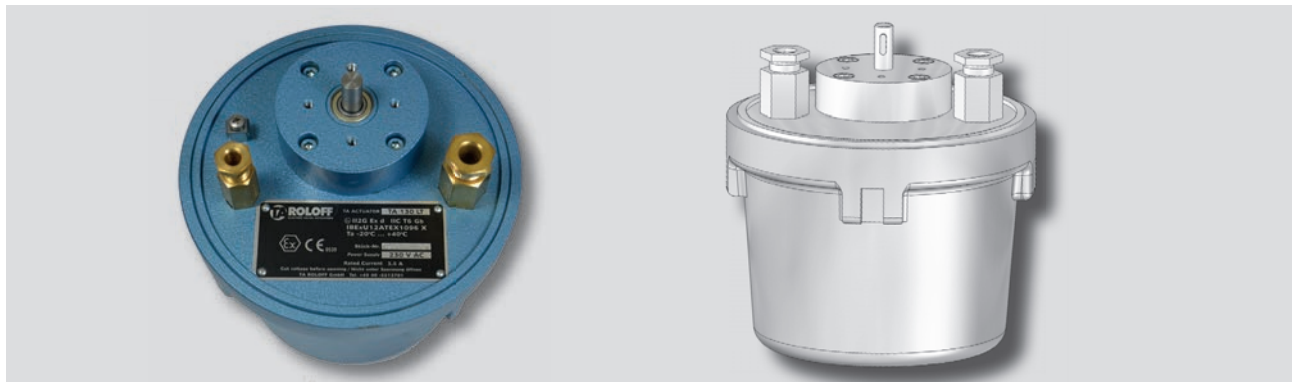
Ordering Information

A 60 - DIRECTION OF ROTATION* (view to the shaft feather key on 12.00 o'clock)	Selection
DIRECTION OF ROTATION TO THE RIGHT (12.00 o'clock to 3.00 o'clock , clockwise')	1R*
DIRECTION OF ROTATION TO THE LEFT (12.00 o'clock to 9.00 o'clock , anti-clockwise')	2L
A 65 - GEAR	Selection
STANDARD	S*
GEAR FOR INCREASED TEMPERATURE 80 °C 176 °F	W
A 70 - ADAPTION	Selection
8x M10 (45°), HOLE CIRCLE Ø 80 mm 3.15" in	S*
BY TYPE	T / U / W
BY DRAWING	ZG
FURTHER ADAPTATIONS ON REQUEST	—
A 75 -COLOUR	Selection
HOUSING COVER METAL RAL5010, BLUE, POWDER-COATED	1B*
HOUSING COVER METAL RAL7016, ANTHRACITE	2S
A 80 -CABLE GLANDS	Selection
2x M20	1S*
FURTHER CABLE GLANDS ON REQUEST	—
A 85 -SPECIAL CONFIGURATION	Selection
WITHOUT SPECIAL CONFIGURATION	S00*
HOUSING HEATING 15 W, incl. THERMOSTAT, down to -30 °C -22 °F	S02

*Default settings

ATEX/IECEx Actuator Type 662R2140 Die-cast aluminium and 662R2141 stainless steel.

Technical Data



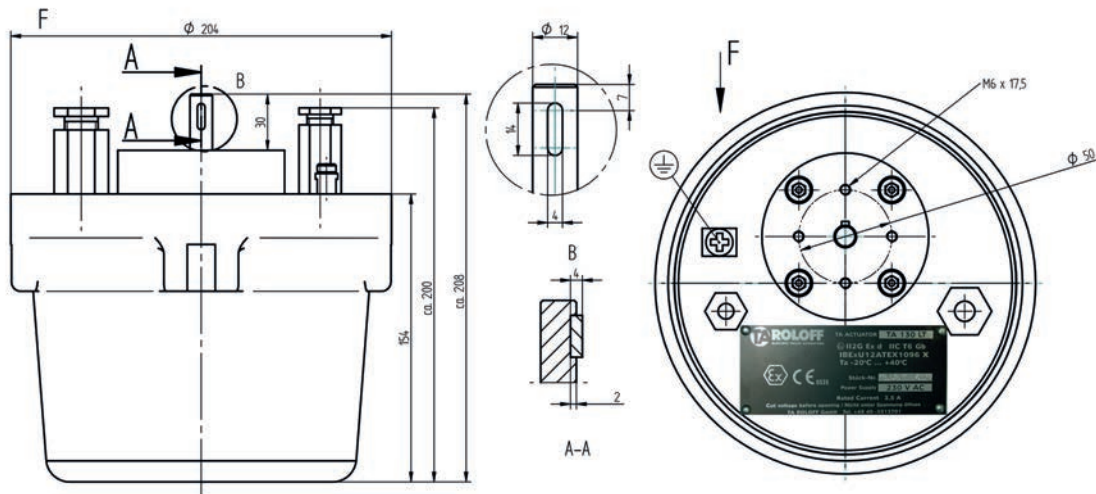
Actuator in die-cast aluminium housing and stainless steel housing

Usage	for driving dampers and valves on combustion equipment	Dimensions [mm]	see dimension drawing
EX-approval	II2G Ex d IIC T6 Gb IBExU 12ATEX1096 X IECEx IBE 14.0056X	Screwed cable glands	1x M16 x 1,5, cabel Ø min. 3.5 mm, max. 8.5 mm min. 0.14, max. 0.33" in 1x M20 x 1.5, cabel Ø min. 11 mm, max. 14.2 mm min. 0.43, max. 0.56" in
Power supply voltage	230 VAC/50 Hz		Weight
Item no.	662R2140 die-cast aluminium housing 662R2141 stainless steel	Protection class	IP65
Form of shaft	Ø12 x 25 mm 0.47x0.98" in and Ø12 x 30 mm 0.47x1.18" in with stainless steel housing	Adaption	4 x M6, screw-hole circle Ø 50 mm 1.97" in
Running time [90°]	60 sec.	Ambient temperature	ATEX: -20 ... + 60 °C -4 ... 140 °F IECEx: -20 ... + 40 °C -4 ... 104 °F
Controlling	Three Point Step	Additional switches	2
End switches	2	TÜV approval	when used with VMS/FMS/ ETAMATIC
Position Feedback	Poti 5K0hm, positive locking and Backlash-free		

Illustrations and technical data refer to the standard version

Stainless steel housing material: Base plate 1.4571
Cover 316 SS

ATEX/IECEX Actuator 6 Nm to 50 Nm



Dimension drawing Actuator Type 662R2140/41/with feather key according to DIN 6885-1 (all dimensions in mm)

Ordering Information

Description / Type (standard variant)	Order no.
Actuator ATEX / IECEx Aluminium cast housing, position feedback POTENTIOMETER 5 kOHM, conductive plastic, TÜV approved, 2 end switches, 2 additional switch, electr. override, IP65 ¹⁾	662R2140 - ...
Actuator ATEX / IECEx Stainless steel, position feedback POTENTIOMETER 5 kOHM, conductive plastic, TÜV approved, 2 end switches, 2 additional switch, electr. override, IP65 ¹⁾	662R2141 - ...

¹⁾ Coupling or lever must be ordered separately

A 03 - TORQUE	Selection
6 Nm ATEX EX II 2G Ex d IIC T6 Gb, -20...60°C -4 ... 140 °F	006
20 Nm ATEX EX II 2G Ex d IIC T6 Gb, -20...60°C -4 ... 140 °F	020
30 Nm ATEX EX II 2G Ex d IIC T6 Gb, -20...60°C -4 ... 140 °F	030
40 Nm ATEX EX II 2G Ex d IIC T6 Gb, -20...60°C -4 ... 140 °F	040
50 Nm ATEX EX II 2G Ex d IIC T6 Gb, -20...60°C -4 ... 140 °F	050
6 Nm IECEx Ex d IIC T6 Gb, -20...40°C -4 ... 104 °F	06
20 Nm IECEx Ex d IIC T6 Gb, -20...40°C -4 ... 104 °F	20
30 Nm IECEx Ex d IIC T6 Gb, -20...40°C -4 ... 104 °F	30
40 Nm IECEx Ex d IIC T6 Gb, -20...40°C -4 ... 104 °F	40
50 Nm IECEx Ex d IIC T6 Gb, -20...40°C -4 ... 104 °F	50
A 05 - FORM OF SHAFT	Selection
ROUND SHAFT 12x30 mm 0.47x1.18" in WITH FEATHER KEY 4x4x14 mm 0.16x0.16x0.55" in	C02
FURTHER SHAFTS ON REQUEST	—

A 10 - POWER SUPPLY VOLTAGE	Selection
POWER SUPPLY VOLTAGE 115 VAC/50 Hz	1155
POWER SUPPLY VOLTAGE 115 VAC/60 Hz	1156
POWER SUPPLY VOLTAGE 230 VAC/50 Hz	2305*
POWER SUPPLY VOLTAGE 230 VAC/60 Hz	2306

*Default settings

Ordering Information

A 15 - RUNNING TIME TO 90°	Selection
30 SECONDS	30
40 SECONDS	40
60 SECONDS	60*
FURTHER RUNNING TIMES ON REQUEST	—
A 20 - ANGULAR DISPLACEMENT	Selection
DISPLACEMENT 90°	090*
DISPLACEMENT 120°	120
DISPLACEMENT 135°	135
DISPLACEMENT 180°	180
DISPLACEMENT 270°	270
A 25 - CONTROLLING	Selection
THREE-POINT-STEP POSITION FEEDBACK „POTENTIOMETER USE“	DPS*
ELECTRONIC CONTROLLING 4 ... 20 mA POSITION FEEDBACK „4 ... 20 mA“, additional position feedback “POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved”	REG
A 30 - POSITION FEEDBACK	Selection
POTENTIOMETER 100 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	1K
POTENTIOMETER 200 OHM (WIRE-WOUND) only possible with THREE-POINT-STEP-CONTROLLING	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved, POSITIVE LOCKING, FREE OF BACKLASH, only possible with THREE-POINT-STEP-CONTROLLING	5K*
4 ... 20 mA Standard at ELECTRONIC CONTROLLING 4 ... 20 mA Caution: position feedback at ETAMATIC/FMS/VMS not failsafe, use additional position feedback “POTENTIOMETER 5 KOHM (COND. PLASTIC), TÜV approved” !	REG
A 35 - ADDITIONAL POSITION FEEDBACK	Selection
WITHOUT ADDITIONAL POSITION FEEDBACK	0*
POTENTIOMETER 100 OHM (WIRE-WOUND)	100R
POTENTIOMETER 1 KOHM (WIRE-WOUND)	1K
POTENTIOMETER 200 OHM (WIRE-WOUND)	200R
POTENTIOMETER 5 KOHM (CONDUCTIVE PLASTIC), TÜV approved Mandatory for failsafe position feedback indication when using electronic control!	5K
A 40 - ELECTRICAL OVERRIDE, selection not possible, CONTROLLING TPS delivery only with ELECTRICAL OVERRIDE CONTROLLING 4 ... 20 mA delivery only without ELECTRICAL OVERRIDE	
WITHOUT	HV0
WITH	HV1
A 45 - IP PROTECTION CLASS, selection not possible, delivery only in IP65	
IP65	65
A 50 - END SWITCHES	Selection
2 END SWITCHES	ES2*
2 END SWITCHES GASTIGHT	ESG

*Default settings

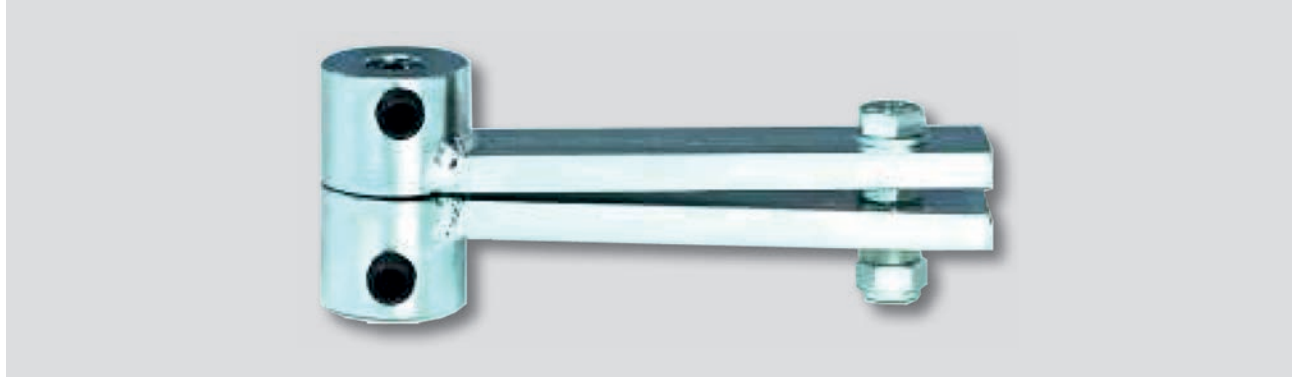
Ordering Information

A 55 – ADDITIONAL SWITCHES	Selection
2 ADDITIONAL SWITCHES	ZS2*
2 ADDITIONAL SWITCHES GASTIGHT	ZG2
A 60 – DIRECTION OF ROTATION¹⁾ (view to the shaft feather key on 12.00 o'clock)	Selection
DIRECTION OF ROTATION TO THE RIGHT (12.00 o'clock to 3.00 o'clock , clockwise ¹⁾)	1R*
DIRECTION OF ROTATION TO THE LEFT (12.00 o'clock to 9.00 o'clock , anti-clockwise ¹⁾)	2L
A 65 – GEAR	Selection
STANDARD	S*
A 70 – ADAPTION	Selection
4x M6, HOLE CIRCLE Ø 50 mm 1.97" in	S*
BY DRAWING	ZG
A 75 – COLOUR	Selection
COVER BLUE	1B*
A 80 – CABLE GLANDS	Selection
1x M16 ATEX, 1x M20 ATEX,	1S*
A 85 – SPECIAL CONFIGURATION	Selection
WITHOUT SPECIAL CONFIGURATION	S00*
SPECIAL CONFIGURATION	S0x

¹⁾Default settings

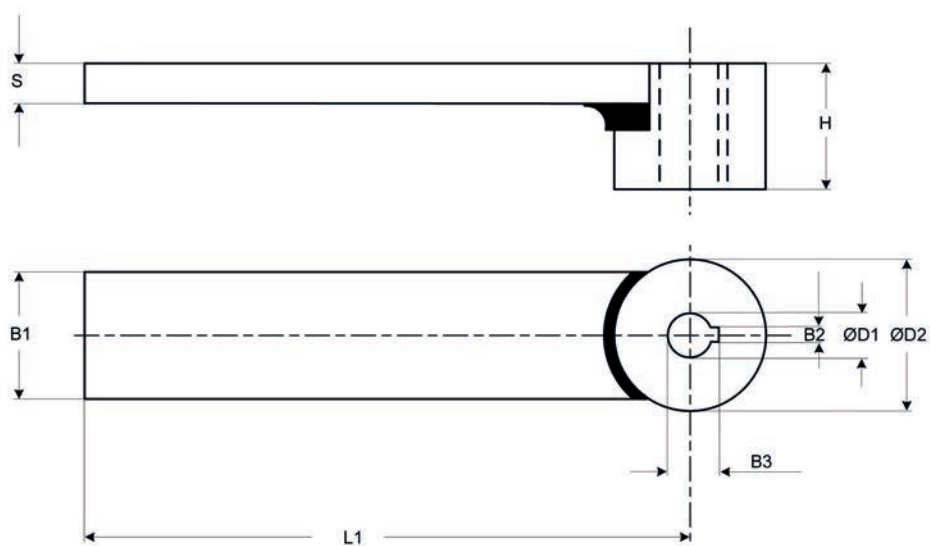
Lever arm coupling for actuators.

Technical Data



Lever arm coupling

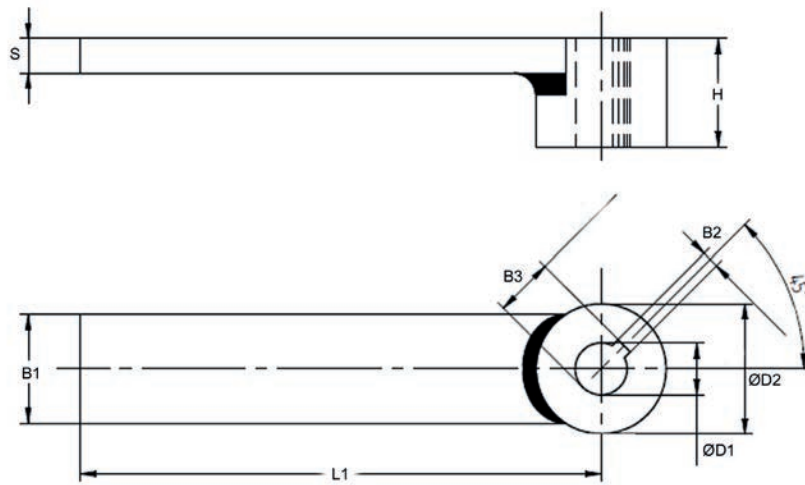
Usage	Mechanical connection between actuator and dampers/valves	Dimensions [mm]	see dimension drawing
Item number according shaft diameter d	662R2308 d=10 mm 0.39" in	Outside diameter	30/35 mm 1.18/1.38" in
	662R2308/1 d=12 mm 0.47" in	Material	zinc-coated steel
	662R2308/S d=12 mm 0.47" in, special length	Maximum torque [Nm]	180
	662R2308/11 d=12 0.47" in, special groove 45°		
	662R2308/2 d=20 mm 0.79" in		
	662R2308/21 d=20 mm 0.79" in, special groove 45° and special length		



Dimension drawing Lever arm coupling

Ordering Information

Maximum torque	B1	B2	B3	ØD1	ØD2	H	L1	S	Order no.
12 NM	25 mm 0.94" in	3 mm ^{I9} 0.12" in ^{I9}	11,5 mm ^{+0,1} 0.42" in ^{+0,1}	10 mm ^{H7} 0.39" in ^{H7}	30 mm 1.18" in	25 mm 0.98" in	120 mm 4.72" in	8 mm 0.31" in	662R2308
40 NM	25 mm 0.94" in	4 mm ^{I9} 0.16" in ^{I9}	14,1 mm ^{+0,1} 0.55" in ^{+0,1}	12 mm ^{H7} 0.47" in ^{H7}	30 mm 1.18" in	25 mm 0.98" in	120 mm 4.72" in	8 mm 0.31" in	662R2308/1
180 NM	25 mm 0.94" in	6 mm ^{I9} 0.24" in ^{I9}	22,8 mm ^{+0,1} 0.90" in ^{+0,1}	20 mm ^{H7} 0.79" in ^{H7}	35 mm 1.38" in	40 mm 1.57" in	117,5 mm 4.62" in	8 mm 0.31" in	662R2308/2
40 NM	25 mm 0.94" in	4 mm ^{I9} 0.16" in ^{I9}	14,1 mm ^{+0,1} 0.55" in ^{+0,1}	12 mm ^{H7} 0.47" in ^{H7}	30 mm 1.18" in	25 mm 0.98" in	200 mm 7.87" in	8 mm 0.31" in	662R2308/S



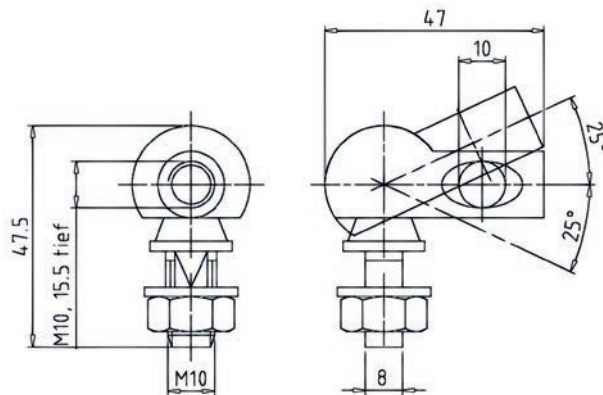
Dimension drawing Lever arm coupling 45° groove

Maximum torque	B1	B2	B3	ØD1	ØD2	H	L1	S	Order no.
40 NM	25 mm 0.94" in	4 mm ^{I9} 0.16" in ^{I9}	13,5 mm ^{+0,1} 0.51" in ^{+0,1}	12 mm ^{H7} 0.47" in ^{H7}	30 mm 1.18" in	25 mm 0.98" in	120 mm 4.72" in	8 mm 0.31" in	662R2308/11
40 NM	25 mm 0.94" in	6 mm ^{I9} 0.24" in ^{I9}	22,8 mm ^{+0,1} 0.90" in ^{+0,1}	20 mm ^{H7} 0.79" in ^{H7}	35 mm 1.38" in	40 mm 1.57" in	200 mm 7.87" in	8 mm 0.31" in	662R2308/21

Ball joint for actuators.

Technical Data

Usage	Mechanical connection between lever linkages	Dimensions [mm]	see dimension drawing
Item no.	662R2305	Material	zinc-coated steel



Dimension drawing ball joint Type 662R2305 (all dimensions in mm)

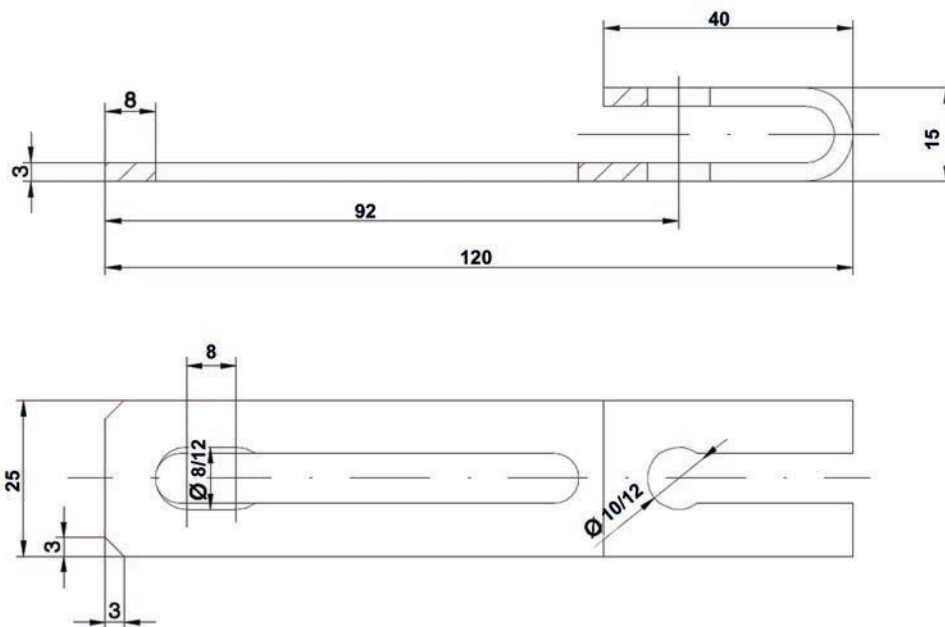
Clamping lever for ball joint.

Technical Data



Clamping lever for ball joint

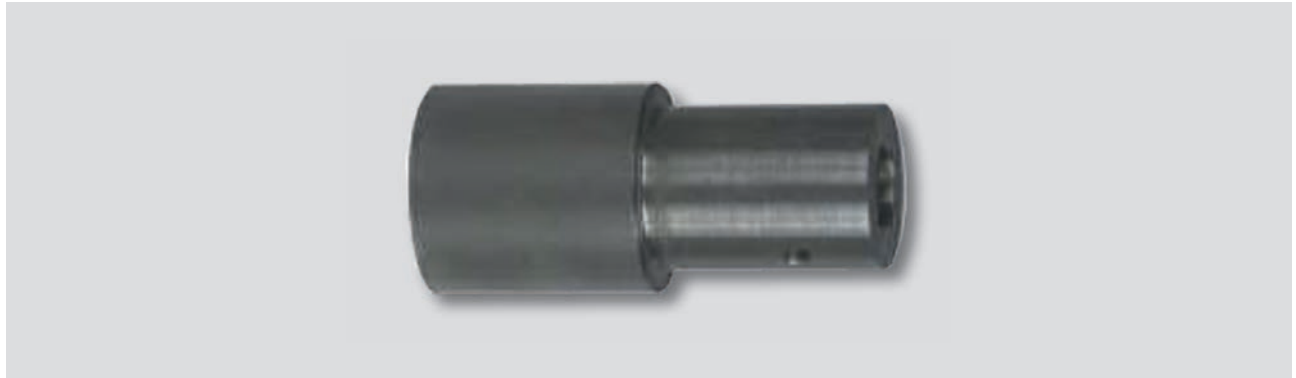
Usage	Mechanical connection between actuator and dampers/valves	Dimensions [mm]	see dimension drawing
Item no.	662R2306	Shaft diameter	10/12 mm 0.39/0.47" in
Material	zinc-coated steel	Maximum torque [Nm]	12



Dimension drawing Clamping lever for ball joint (all dimensions in mm)

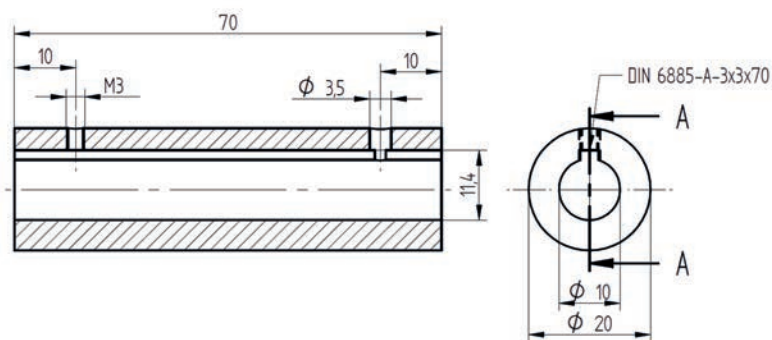
Coupling for actuators.

Technical Data

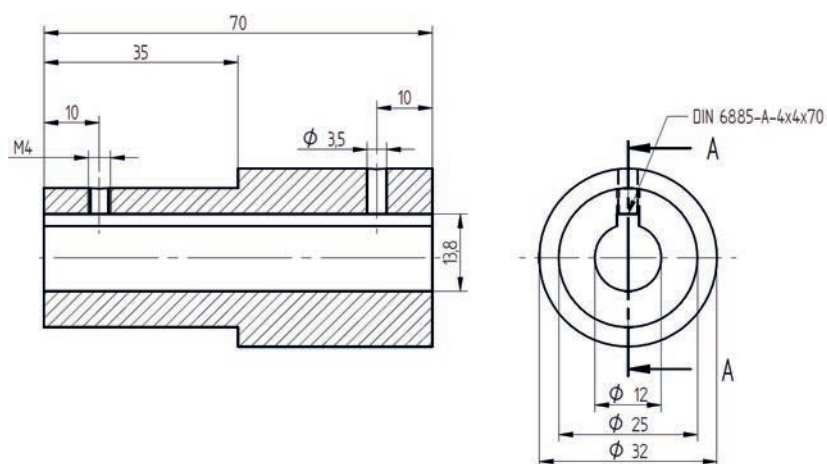


Coupling

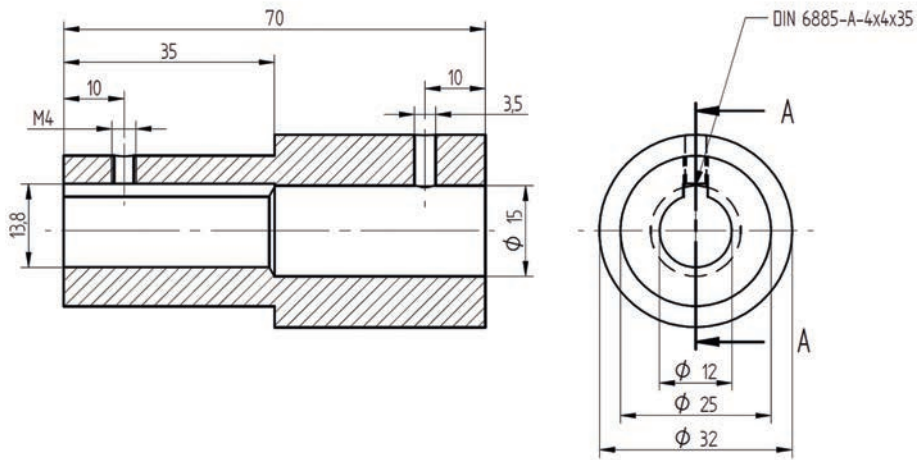
Usage	Mechanical connection between actuator and control dampers	Dimensions [mm]	see dimension drawing
Item no.	According to shaft diameter, see order no. List on the following page	Material	free cutting steel, gunmetal finish



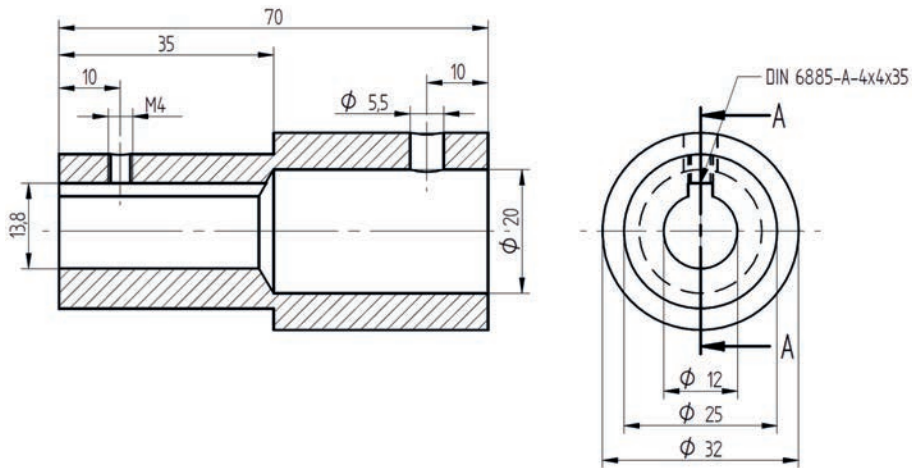
Dimension drawing plug-in coupling type 662R2188 shaft 10 mm to 10 mm (all dimensions in mm)



Dimension drawing Coupling Type 662R2189 shaft 12 mm to 12 mm (all dimensions in mm)



Dimension drawing Coupling type 662R2192 shaft 12 to 15 mm (all dimensions in mm)



Dimension drawing Coupling type 662R2196 shaft 12 to 20 mm (all dimensions in mm)

Ordering Information

Description / Type	Order no.
Coupling for actuator with shaft d=10 mm 0.39" in (motor side) to d2=10 mm 0.39" in (flap side)	662R2188
Coupling for actuator with shaft d=12 mm 0.47" in (motor side) to d2=12 mm 0.47" in (flap side)	662R2189
Coupling for actuator with shaft d=12 mm 0.47" in (motor side) to d2=15 mm 0.59" in (flap side)	662R2192
Coupling for actuator with shaft d=12 mm 0.47" in (motor side) to d2=16 mm 0.63" in (flap side)	662R2193
Coupling for actuator with shaft d=12 mm 0.47" in (motor side) to d2=10 mm 0.39" in (flap side)	662R2195
Coupling for actuator with shaft d=12 mm 0.47" in (motor side) to d2=20 mm 0.79" in (flap side)	662R2196
Coupling for actuator with shaft d=20 mm 0.79" in (motor side) to d2=20 mm 0.79" in (flap side)	662R2197

Cooling fin coupling with thermal separation.

Technical Data



Cooling fins coupling with thermal separation

Usage	Mechanical connection between actuator and controll dampers	Dimensions (Outside Diameter x length)	68x89 mm 2.68x3.50" in
Item no.	662R2235 Shaft Ø 12 mm 0.47" in 662R2236 Shaft Ø 20/12 mm 0.79/0.47" in	Material	Aluminium
Torque max. [Nm]	40		

Square hollow profile console Aluminium.

Technical Data



Square hollow profile console Aluminium

Usage	Mechanical connection between actuator and control dampers	Dimensions	140x85x80 mm 5.51x3.35x3.15" in
Item no.	662R2225	Material	Aluminium
Torque max. [Nm]	40	Adaption (drive)	LK Ø50 mm 1.97" in, 4 x 90°

U-angle bracket sheet steel, galvanized.

Technical Data



U-angle bracket sheet steel

Usage	Mechanical connection between actuator and control dampers	Dimensions H/W/D	126x90x80 4.96x3.54x3.15" in
Item no.	662R2226	Material	zinc-coated steel
Torque max. [Nm]	20	Adaption (Drive)	Hole circle Ø50 mm 1.97" in, 4 x 90°

Electrical connection to ETAMATIC.

The Three Point Step outputs of ETAMATIC are suitable for a continuous current up to max. 50 mA. Motors with a higher power consumption can only be used with an additional circuit to ETAMATIC. Otherwise, the output of ETAMATIC will be irreparably damaged.

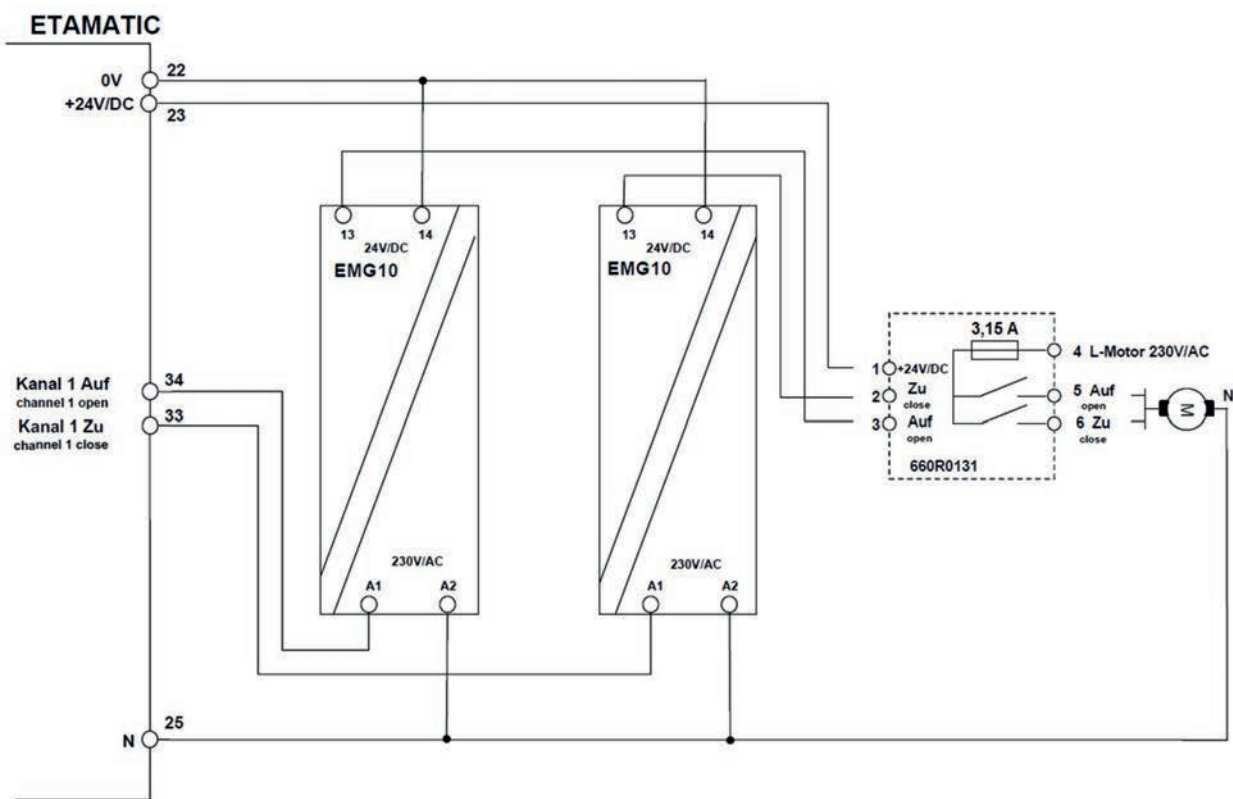
Additional parts

2x Signalconverter Interface 230 VAC/24 VDC, 1-phase

Order no. 660R0028 (230 VAC) 660R0029 (115 VAC)

1x Relay module with 2 relays to control the pos. of an actuator up to 3.15 A

Order no. 660R0131



Wiring diagram signal converter

Spare parts for actuator.

Ordering Information

Description / Type	Order no.
POTENTIOMETER NOVOTEC 5 KOHM, TÜV approved, without gear position feedback for actuators type 662R2111...R2127	660P7001
POTENTIOMETER NOVOTEC 5 KOHM to 90°, TÜV approved, with long gear position feedback for actuators type 662R2127, 662R2112, 662R2121, 662R2122, 662R2140/41	660P7005
POTENTIOMETER NOVOTEC 5 KOHM to 135°, TÜV approved, with long gear position feedback for actuators type 662R2127, 662R2112, 662R2121, 662R2122	660P7015
POTENTIOMETER NOVOTEC 5 KOHM to 90°, TÜV approved, with short gear additional position feedback for actuators type 662R2112, 662R2121, 662R2122	660P7006
POTENTIOMETER NOVOTEC 5 KOHM to 90°, TÜV approved, with long gear position feedback for actuators type 662R2111	660P7007
POTENTIOMETER NOVOTEC 5 KOHM to 135°, TÜV approved, with long gear position feedback for actuators type 662R2111	660P7017
MST5 board, incl. capacitor, 230 VAC, for actuators type 662R2111	662R2177
Capacitor 0,18 µF/500 V for actuators type 662R2111 / 662R2112	662R2175
End switch with connecting cable for actuators type 662R2111 R2141	662R2180
End switch, gastight, with connecting cable for actuators type 662R2111	662R2176
Housing cover, plastic, blue, for actuators IP54, type 662R2127 and 662R2111 to SN. 29500	662R2190
Housing cover, die-cast, blue, for actuators IP65, type 662R2127 and 662R2111 up to SN. 29500	662R2191
Housing cover, die-cast, blue, for actuators IP65, type 662R2127 and 662R2111 from SN. 30000	662E2191
Housing cover, die-cast, blue, for actuators IP65, type 662R2112/662R2121/662R2122	662E2192

Gas volume control dampers up to 60 °C | 140°F, DVGW proofed, non linear

Type 668M2300 Aluminium

Type 668M2310 Stainless steel.

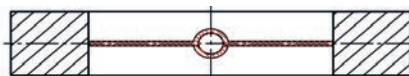
Technical Data



Gas volume control damper 668M23xx (aluminium)

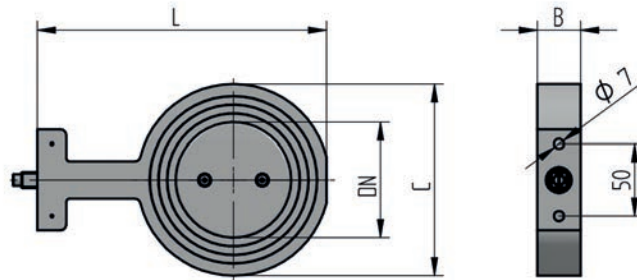
Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
Mode of operation	for electric actuator 668M2006, 668M2020, 668M2040 with internal square 11.1x11.1 mm 0.44x0.44" in (IVK11)	Mounting position	horizontal to vertical, not hanging downwards
Operating pressure	max. 500 mbar 7.25 psi	Medium temperature	-20 °C ... +60 °C -4 ... 140 °F
Design	Butterfly disc without limit stop Intermediate flange butterfly valve - clamp-in type, flow rate non-linear	Medium	Gas families 1, 2, 3 and other neutral gaseous media*, Hydrogen
Test specification	Type examination certificate according to the Gas Appliances Directive DIN EN 13611:2019 and DIN EN161:2013 (for medium temperature -20 °C to +60 °C -4 to 140 °F)	Leakage	approx. 1 % of Kv value
Positioning speed	max. 5 s/90°	Material	668M2300 Aluminium 668M2310 Stainless steel

*Aluminium version suitable for biogas up to max. 0.1 vol.% H₂S.
Gas must be dry under all circumstances and must not condense.



Butterfly plate (flow, not linear)

Each damper can be reduced by a maximum of 2 nominal diameters.
Nominal diameters: DN40 ... DN150
For nominal sizes > DN150, 662R23V/662R24V/662R25V must be used.



Dimension drawing Gas volume control damper 668M2xxx (all dimensions in mm)

Type non-linear	DN	L	C	B	Weight	Material
668M2300/040/ ... /B30	40	155 mm 6.10" in	87 mm 3.42" in	30 mm 1.18" in	0.7 kg 1.54 lb	Aluminium
668M2310/040/ ... /B30	40	155 mm 6.10" in	87 mm 3.42" in	30 mm 1.18" in	1.75 kg 3.86 lb	Stainless steel
668M2300/040/ ... /B40	40	155 mm 6.10" in	87 mm 3.42" in	30 mm 1.18" in	0.85 kg 1.87 lb	Aluminium
668M2310/040/ ... /B40	40	155 mm 6.10" in	87 mm 3.42" in	30 mm 1.18" in	2.25 kg 4.96 lb	Stainless steel
668M2300/050/ ... /B30	50	165 mm 6.50" in	97 mm 3.81" in	30 mm 1.18" in	0.8 kg 1.76 lb	Aluminium
668M2310/050 ... /B30	50	165 mm 6.50" in	97 mm 3.81" in	30 mm 1.18" in	2 kg 4.40 lb	Stainless steel
668M2300/050/ ... /B40	50	165 mm 6.50" in	97 mm 3.81" in	40 mm 1.57" in	1 kg 2.20 lb	Aluminium
668M2310/050/ ... /B40	50	165 mm 6.50" in	97 mm 3.81" in	40 mm 1.57" in	2.6 kg 5.73 lb	Stainless steel
668M2300/065/ ... /B30	65	183 mm 7.20" in	117 mm 4.60" in	30 mm 1.18" in	1 kg 2.20 lb	Aluminium
668M2310/065/ ... /B30	65	183 mm 7.20" in	117 mm 4.60" in	30 mm 1.18" in	2.5 kg 5.51 lb	Stainless steel
668M2300/065/ ... /B40	65	183 mm 7.20" in	117 mm 4.60" in	40 mm 1.57" in	1.25 kg 2.75 lb	Aluminium
668M2310/065/ ... /B40	65	183 mm 7.20" in	117 mm 4.60" in	40 mm 1.57" in	3.2 kg 7.05 lb	Stainless steel
668M2300/080/ ... /B30	80	201 mm 7.91" in	133 mm 5.24" in	30 mm 1.18" in	1.2 kg 2.64 lb	Aluminium
668M2310/080/ ... /B30	80	201 mm 7.91" in	133 mm 5.24" in	30 mm 1.18" in	3 kg 6.61 lb	Stainless steel
668M2300/080/ ... /B40	80	201 mm 7.91" in	133 mm 5.24" in	40 mm 1.57" in	1.5 kg 3.30 lb	Aluminium
668M2310/080/ ... /B40	80	201 mm 7.91" in	133 mm 5.24" in	40 mm 1.57" in	3.8 kg 8.38 lb	Stainless steel
668M2300/100/ ... /B30	100	221 mm 8.70" in	153 mm 6.02" in	30 mm 1.18" in	1.45 kg 3.20 lb	Aluminium
668M2310/100/ ... /B30	100	221 mm 8.70" in	153 mm 6.02" in	30 mm 1.18" in	3.4 kg 7.49 lb	Stainless steel
668M2300/100/ ... /B40	100	221 mm 8.70" in	153 mm 6.02" in	40 mm 1.57" in	1.8 kg 3.97 lb	Aluminium
668M2310/100/ ... /B40	100	221 mm 8.70" in	153 mm 6.02" in	40 mm 1.57" in	4.4 kg 9.70 lb	Stainless steel
668M2300/125/ ... /B30	125	248 mm 9.76" in	183 mm 7.20" in	30 mm 1.18" in	1.9 kg 4.19 lb	Aluminium
668M2310/125/ ... /B30	125	248 mm 9.76" in	183 mm 7.20" in	30 mm 1.18" in	4.4 kg 9.70 lb	Stainless steel
668M2300/125/ ... /B40	125	248 mm 9.76" in	183 mm 7.20" in	40 mm 1.57" in	2.3 kg 5.07 lb	Aluminium
668M2310/125/ ... /B40	125	248 mm 9.76" in	183 mm 7.20" in	40 mm 1.57" in	5.6 kg 12.46 lb	Stainless steel
668M2300/150/ ... /B30	150	273 mm 10.75" in	208 mm 8.19" in	30 mm 1.18" in	2.3 kg 5.07 lb	Aluminium
668M2310/150/ ... /B30	150	273 mm 10.75" in	208 mm 8.19" in	30 mm 1.18" in	5.2 kg 11.46 lb	Stainless steel
668M2300/150/ ... /B40	150	273 mm 10.75" in	208 mm 8.19" in	40 mm 1.57" in	2.7 kg 5.95 lb	Aluminium
668M2310/150/ ... /B40	150	273 mm 10.75" in	208 mm 8.19" in	40 mm 1.57" in	6.6 kg 14.55 lb	Stainless steel

All listed nominal diameters are available with reduction!
 Order example for reduction DN100 to DN80: 668M2300/100/080

Ordering Information

Damper type SVGA aluminium up to 60 °C | 140 °F

Description / Type	Order no.
<p>Damper:</p> <ul style="list-style-type: none"> - Shaft end with square 11.1x11.1x11.5 mm 0.44x0.44x0.45" in - For clamping between flanges PN6 ... PN40 - Suitable for gases of the 1st, 2nd and 3rd gas family, hydrogen - Type examination certificate in accordance with the Gas Appliances Directive - Flow rate not linear - Butterfly disc without limit stop - Operating pressure: max. 500 mbar 7.25 psi - For pressure ratings PN10 ... PN40, the valve is supplied with mounting sleeves as an installation aid <p>Suitable for electric actuator 668M2006, 668M2020, 668M2040 with internal square socket 11x11 mm 0.44x0.44" in (IVK11). Incl. fastening material and mounting sleeves.</p> <p>No separate coupling/console is required. The console is part of the damper.</p> <p>As the damper does not have a position indicator, we recommend using an actuator with a position indicator.</p>	668M2300
A10 "INTERNAL DIAMETER"	Selection
INTERNAL DIAMETER DN40	040
INTERNAL DIAMETER DN50	050
INTERNAL DIAMETER DN65	065
INTERNAL DIAMETER DN80	080
INTERNAL DIAMETER DN100	100
INTERNAL DIAMETER DN125	125
INTERNAL DIAMETER DN150	150
A20 "REDUCTION"	Auswahl
WITHOUT	000
DN40 REDUCED TO DN25	025
DN40/DN50 REDUCED TO DN32	032
DN50/DN65 REDUCED TO DN40	040
DN65/DN80 REDUCED TO DN50	050
DN80/DN100 REDUCED TO DN65	065
DN100/DN125 REDUCED TO DN80	080
DN125/DN150 REDUCED TO DN100	100
DN150 REDUCED TO DN125	125
A30 "TEMPERATURE RANGE"	Selection
-20 ... +60 °C -4 ... 140 °F	60
A40 "SEALING OF THE DAMPER DISC"	Selection
NOT TIGHT CLOSING, leakage approx. 1% of Kvs value 90°	0
DAMPER DISC CLOSING TIGHTLY, without leakage	D
A50 "MATERIAL"	Selection
HOUSING ALUMINIUM, DAMPER SHAFT / DAMPER DISC STAINLESS STEEL	AL
A60 "HAND FEED"	Selection
WITHOUT HAND FEED, for mounting on actuator	0
WITH HAND FEED, infinitely adjustable locking lever	H
A70 "LENGTH"	Selection
LENGTH 30 mm 1.18" in	B30
LENGTH 40 mm 1.57" in	B40

Ordering Information

Damper type SVGS Stainless steel up to 60 °C | 140 °F

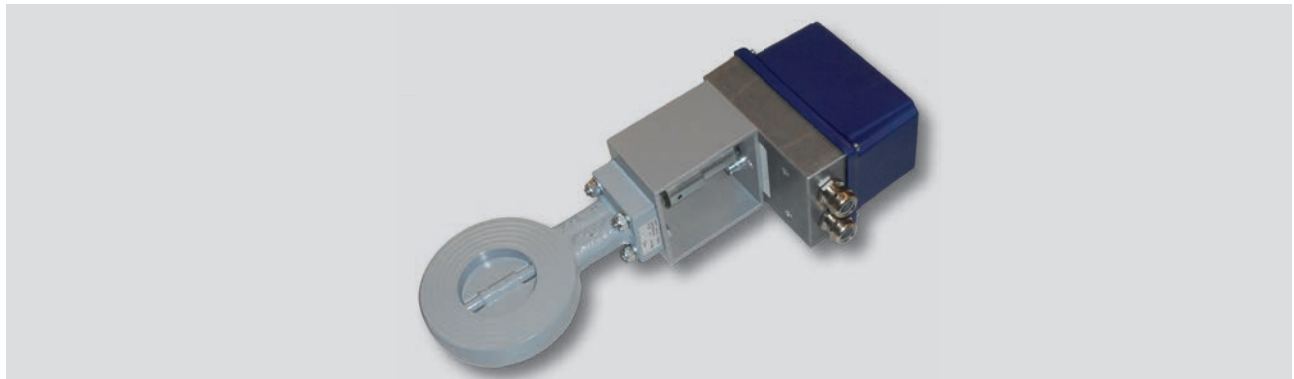
Description / Type	Order no.
<p>Damper:</p> <ul style="list-style-type: none"> - Shaft end with square 11.1x11.1x11.5 mm 0.44x0.44x0.45" in - For clamping between flanges PN6 ... PN40 - Suitable for biogas, hydrogen - Type examination certificate in accordance with the Gas Appliances Directive - Flow rate not linear - Butterfly disc without limit stop - Operating pressure: max. 500 mbar 7.25 psi - For pressure ratings PN10 ... PN40, the valve is supplied with mounting sleeves as an installation aid <p>Suitable for electric actuator 668M2006, 668M2020, 668M2040 with internal square socket 11x11 mm 0.44x0.44" in (IVK11). Incl. fastening material and mounting sleeves.</p> <p>No separate coupling/console is required. The console is part of the damper.</p> <p>As the damper does not have a position indicator, we recommend using an actuator with a position indicator.</p>	668M2310
A10 "INTERNAL DIAMETER"	Selection
INTERNAL DIAMETER DN40	040
INTERNAL DIAMETER DN50	050
INTERNAL DIAMETER DN65	065
INTERNAL DIAMETER DN80	080
INTERNAL DIAMETER DN100	100
INTERNAL DIAMETER DN125	125
INTERNAL DIAMETER DN150	150
A20 "REDUCTION"	Auswahl
WITHOUT	000
DN40 REDUCED TO DN25	025
DN40/DN50 REDUCED TO DN32	032
DN50/DN65 REDUCED TO DN40	040
DN65/DN80 REDUCED TO DN50	050
DN80/DN100 REDUCED TO DN65	065
DN100/DN125 REDUCED TO DN80	080
DN125/DN150 REDUCED TO DN100	100
DN150 REDUCED TO DN125	125
A30 "TEMPERATURE RANGE"	Selection
-20 ... +60 °C -4 ... 140 °F	60
A40 "SEALING OF THE DAMPER DISC"	Selection
NOT TIGHT CLOSING, leakage approx. 1% of Kvs value 90°	0
CLAP DISC CLOSING TIGHTLY, without leakage	D
A50 "MATERIAL"	Selection
HOUSING STAINLESS STEEL, DAMPER SHAFT / DAMPER DISC STAINLESS STEEL	E
A60 "HAND FEED"	Selection
WITHOUT HAND FEED, for mounting on actuator	0
WITH HAND FEED, infinitely adjustable locking lever	H
A70 "LENGTH"	Selection
LENGTH 30 mm 1.18" in	B30
LENGTH 40 mm 1.57" in	B40

Mounting

Description	Bestell-Nr.
Should no actuator with 11.1 mm 0.44" in internal square drive be available, the dampers can also be mounted on output shafts.	Montage1...
A10 "MOUNTING"	Auswahl
DAMPER 668M2 ... FOR MOUNTING ON SHAFT 10 mm 0.39" in WITH FEATHER KEY 3x3 mm 0.12x0.12" in HOLE CIRCLE 50 mm 1.97" in, 4x 90° 6.5 mm 0.25" in	13
DAMPER 668M2 ... FOR MOUNTING ON SHAFT 12 mm 0.47" in WITH FEATHER KEY 4x4 mm 0.16x 0.16 " in HOLE CIRCLE 50 mm 1.97" in, 4x 90° 6.5 mm 0.25" in	14
DAMPER 668M2 ... FOR MOUNTING ON BT-ACTUATOR 662R500 ...	15
DAMPER 668M2 ... FOR MOUNTING ON EX-ACTUATOR WITH SHAFT 12 mm 0.47" in WITH FEATHER KEY 4x4 mm 0.16x 0.16" in HOLE CIRCLE 50 mm 1.97" in, 4x 90° 6.5 mm 0.25" in	16

Gas volume control dampers up to 60 °C | 140 °F, DVGW proofed, non linear from DN200 Type 662R23V.

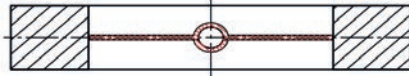
Technical Data



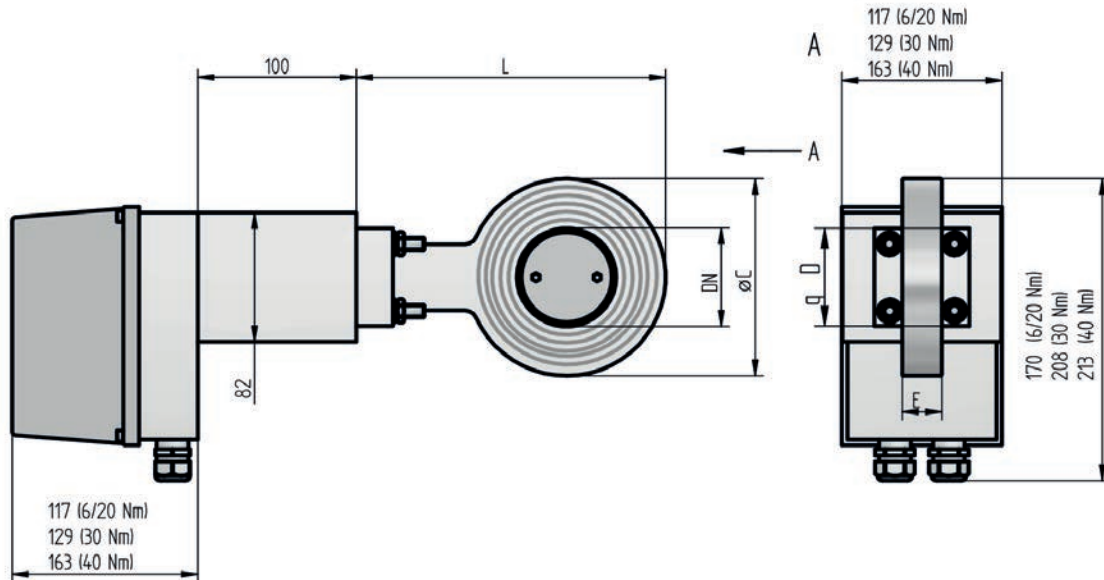
Gas control damper with bracket and coupling

Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
Mode of operation	for electric actuator	Mounting position	any
Operating pressure	0 bis 1 bar 0 to 14.50 psi	Medium temperature	-20 °C ... +60 °C -4 ... 140 °F
Design	Butterfly disc without limit stop Intermediate flange butterfly valve - clamp-in type	Medium	Natural gas, as well as neutral and non-aggressive gases
Test specification	Type examination certificate according 90/396/EWG Prod. ID. Nr. CE-0085- AR0408 ·DIN 3394-1 Klasse RO ·DIN 3391 (for medium temperature -20 °C to +60 °C -4 to 140 °F)	Leckage	approx. 1 % of Kv value

Gas volume control dampers



Butterfly plate (flow, not linear)



Gas control damper with bracket and coupling (all dimensions in mm)

Gewicht	DN	L	ØC	qD	E
12.7 kg 28 lb	200	344 mm 13.54" in	270 mm 10.63" in	80 mm 3.15" in	40 mm 1.57" in
13.7 kg 30.20 lb	250	394 mm 15.51" in	320 mm 12.60" in	80 mm 3.15" in	40 mm 1.57" in
16.2 kg 35.7 lb	300	444 mm 17.48" in	370 mm 14.57" in	80 mm 3.15" in	45 mm 1.77" in
27.7 kg 61.07 lb	350	523 mm 20.59" in	428 mm 16.85" in	80 mm 3.15" in	45 mm 1.77" in
39 kg 86 lb	400	561 mm 22.08" in	465 mm 18.31" in	80 mm 3.15" in	45 mm 1.77" in

Ordering Information 662R23V, Nominal Diameter > DN150

Configuration incl. console, coupling and assembly to actuator*

662R23V-	A 10 INTERNAL DIAMETER	A 20 REDUCTION	
A 10 – INTERNAL DIAMETER			Selection
INTERNAL DIAMETER DN200	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 1 bar 14.5 psi, PN10-PN16, ANSI 150 lbs		200
INTERNAL DIAMETER DN250	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 0.5 bar 7.25 psi, PN10, ANSI 150 lbs		250
INTERNAL DIAMETER DN300	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 0.3 bar 4.35 psi, PN6-PN10		300
INTERNAL DIAMETER DN350	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 0.2 bar 2.90 psi, PN10-PN16		350
INTERNAL DIAMETER DN400	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 0.15 bar 2.17 psi, PN6-PN16		400
Selection			Selection
WITHOUT REDUCTION			000
REDUCED TO SPECIFICATION BY CUSTOMER			—

*Actuator must be ordered separately, following information are indicative at a difference pressure of 0,1 bar | 1,45 psi:

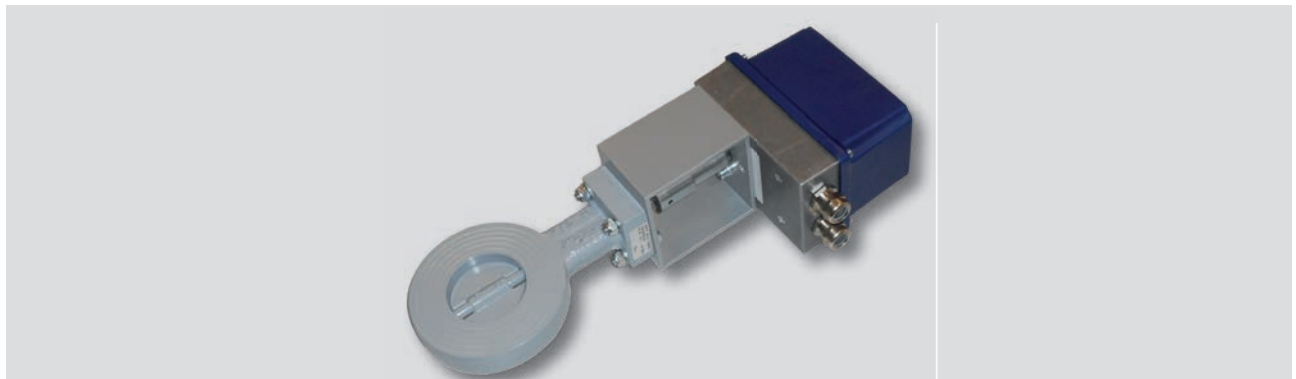
DN200 ... DN250	20 Nm	Type 662R2111 or 668M2020 with 12 mm 0.47" in shaft
DN300	30 Nm	Type 662R2112 or 668M2040 with 12 mm 0.47" in shaft
DN350	40 Nm	Type 662R2121 or 668M2040 with 12 mm 0.47" in shaft
DN400	90 Nm	Type 662R2123

Mounting for gas dampers 662R23 / 662R24 / 662R25

A 10 „MONTAGE“	Selection
DN200/250, FOR MOUNTING ON SHAFT 12 mm 0.47" in WITH PARALLEL KEY 4x4 mm 0.16x0.16" in	___ 21
DN200/250, FOR MOUNTING ON SHAFT 20 mm 0.79" in WITH PARALLEL KEY 6x6 mm 0.24x0.24" in	___ 22
DN300, FOR MOUNTING ON SHAFT 12 mm 0.47" in	___ 23
DN400, FOR MOUNTING ON SHAFT 12 mm 0.47" in	___ 24

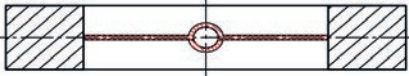
Gas volume control dampers f. Biogas up to 60 °C | 140 °F Stainless steel, DVGW proofed, non linear from DN200 Type 662R24V.

Technical Data

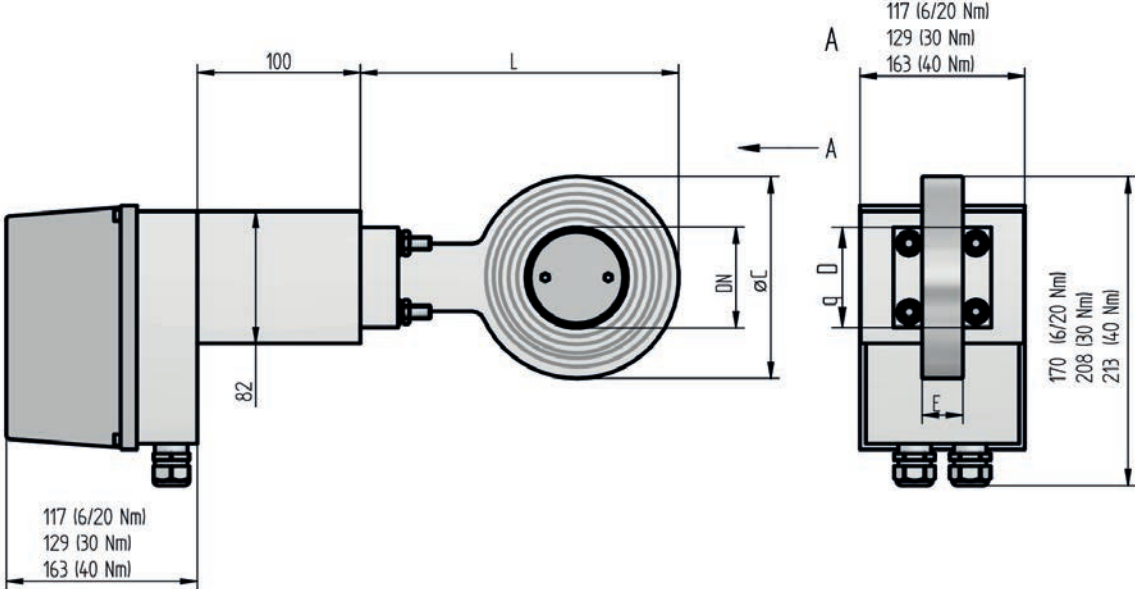


Gas control damper with bracket and coupling

Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
Mode of operation	for electric actuator	Mounting position	any
Operating pressure	0 bis 1 bar 0 to 14.50 psi	Medium temperature	-20 °C ... +60 °C -4 ... 140 °F
Design	Butterfly disc - clamp-in type	Medium	Biogas
Test specification	Type examination certificate according 90/396/EWG Prod. ID. Nr. CE-0085-AR0408 · DIN 3394-1 Klasse RO · DIN 3391 · (for medium temperature -20 °C to +60 °C -4 to 140 °F)	Leckage	approx. 1 % of Kv value



Butterfly plate (flow, not linear)



Gas control damper with bracket and coupling (all dimensions in mm)

DN	L	ØC	qD	E
200	344 mm 13.54" in	270 mm 10.63" in	80 mm 3.15" in	40 mm 1.57" in

Rest see 662R23

Ordering Information 662R24V, Nominal Diameter > DN150

Configuration incl. console, coupling and assembly to actuator*

662R24V-	A 10 INTERNAL DIAMETER	A 20 REDUCTION
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A 10 - INTERNAL DIAMETER		Selection
INTERNAL DIAMETER DN200	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 1 bar 14.5 psi, PN10-PN16, ANSI 150 lbs	200
INTERNAL DIAMETER DN250	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 0.5 bar 7.25 psi, PN10, ANSI 150 lbs	250
INTERNAL DIAMETER DN300	PRESSURE RANGE 0 ... 4 bar 0 ... 58 psi, DELTA P MAX. 0.3 bar 4.35 psi, PN6-PN10	300
INTERNAL DIAMETER DN350	PRESSURE RANGE 0... 4 bar 0 ... 58 psi, DELTA P MAX. 0.2 bar 2.90 psi, PN10-PN16	350
Selection		Selection
WITHOUT REDUCTION		000
REDUCED TO SPECIFICATION BY CUSTOMER		—

* Actuator must be ordered separately, following information are indicative at a difference pressure of 0,1 bar | 1,45 psi:

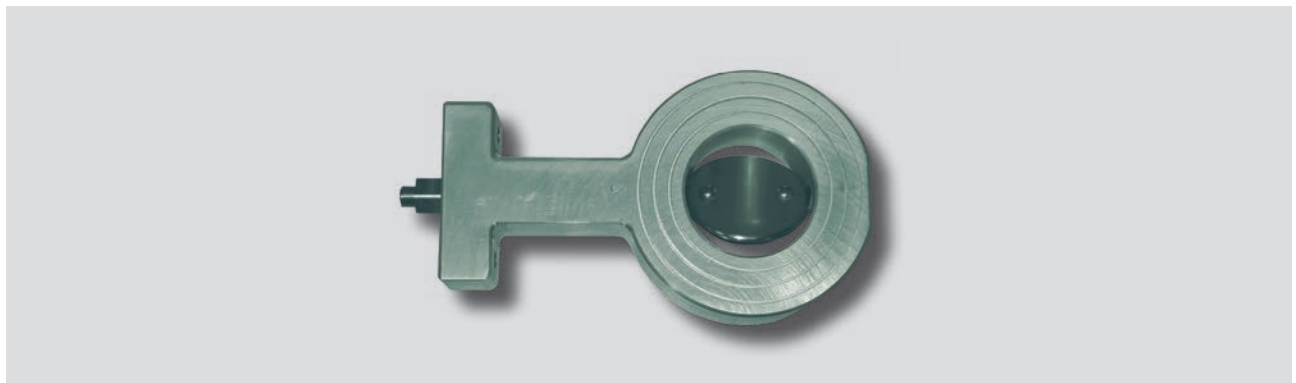
DN200 ... DN250	20 Nm Type 662R2111 or 668M2020 with 12 mm 0.47" in shaft
DN300	30 Nm Type 662R2112 or 668M2040 with 12 mm 0.47" in shaft
DN350	40 Nm Type 662R2121 or 668M2040 with 12 mm 0.47" in shaft
DN400	90 Nm Type 662R2123

Mounting for gas dampers 662R23 / 662R24 / 662R25

A 10 „MONTAGE“	Selection
DN200/250, FOR MOUNTING ON SHAFT 12 mm 0.47" in WITH PARALLEL KEY 4x4 mm 0.16x0.16" in	___ 21
DN200/250, FOR MOUNTING ON SHAFT 20 mm 0,79" in WITH PARALLEL KEY 6x6 mm 0.24x0.24" in	___ 22
DN300, FOR MOUNTING ON SHAFT 12 mm 0.47" in	___ 23
DN400, FOR MOUNTING ON SHAFT 12 mm 0.47" in	___ 24

Control damper for flue gas / air, up to 100 °C | 212 °F non-linear, without DVGW approval Type 668M2200 Aluminium.

Technical Data



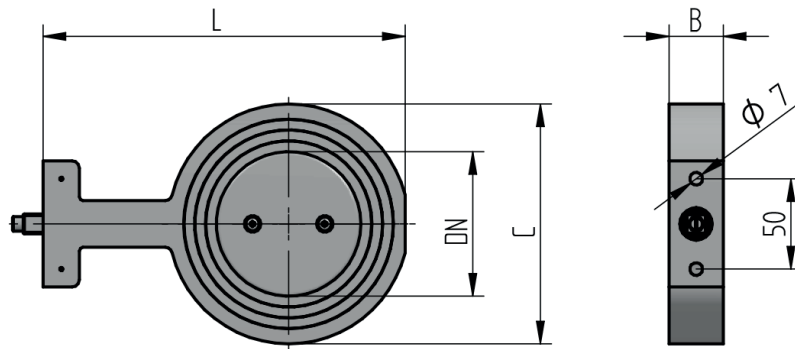
Gas volume control damper 668M23xx (aluminium)

Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
Mode of operation	for electric actuator 668M2006, 668M2020, 668M2040 with internal square 11,1x11,1 mm 0.44x0.44" in (IVK11)	Mounting position	horizontal to vertical, not hanging downwards
		Medium temperature	-20 ... +100 °C -4 ... 212 °F
Operating pressure	max 500 mbar 7,25 psi	Medium	fluegas/air
Design	Butterfly disc without limit stop Intermediate flange butterfly valve - clamp-in type, flow rate non-linear	Leckage	approx. 1 % of Kv value
Positioning speed	max. 5 s/90°	Material	Aluminium

*Stainless steel version suitable for biogas up to max. 0.1 vol.% H₂S.
Gas must be dry under all circumstances and must not condense.

Each damper can be reduced by a maximum of 2 nominal diameters.
Nominal diameters: DN40 ... DN200
Use 662R22V for nominal sizes > DN200.

Control dampers



Control damper for flue gas or air 668M2xxx (all dimensions in mm)

DN	C	B	L	Weight B30	Weight B40
40	87 mm 3.42" in	30 mm 1.18" in	155 mm 6.10" in	0.7 kg 1.54 lb	0.85 kg 1.76 lb
50	97 mm 3.82" in	30 mm 1.18" in	165 mm 6.50" in	0.8 kg 1.76 lb	1 kg 2.20 lb
65	117 mm 4.60" in	30 mm 1.18" in	183 mm 7.20" in	1 kg 2.20 lb	1.25 kg 2.76 lb
80	133 mm 5.24" in	30 mm 1.18" in	201 mm 7.91" in	1.2 kg 2.65 lb	1.5 kg 3.31 lb
100	153 mm 6.02" in	30 mm 1.18" in	221 mm 8.70" in	1.45 kg 3.20 lb	1.8 kg 3.97 lb
125	183 mm 7.20 in	30 mm 1.18" in	248 mm 9.76" in	1.9 kg 4.19 lb	2.3 kg 5.07 lb
150	208 mm 8.19" in	30 mm 1.18" in	273 mm 10.75" in	2.3 kg 5.07 lb	2.75 kg 6.06 lb
200	256 mm 10.08" in	40 mm 1.57" in	324 mm 12.75" in		4.4 kg 9.70 lb

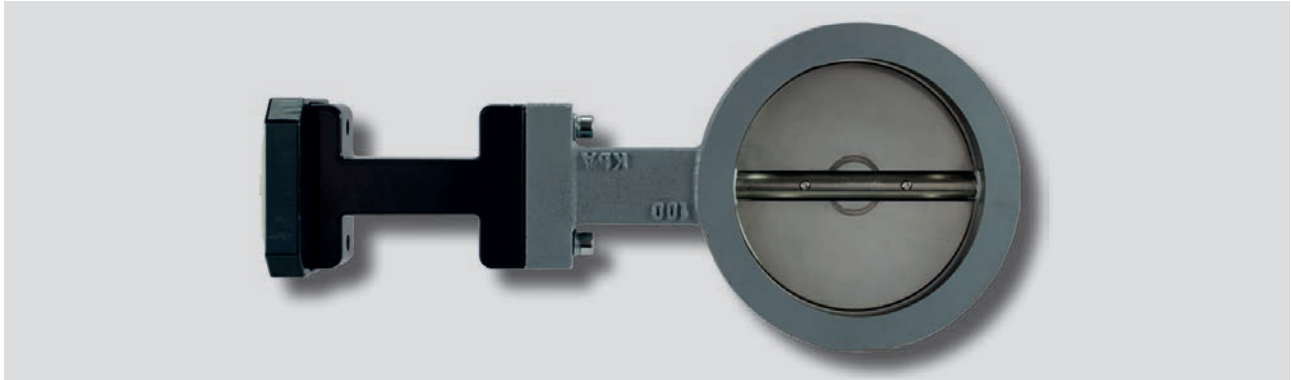
Ordering Information

Damper type SVA aluminium up to 100 °C | 212 °F

Description / Type	Order no.
Flue gas/air damper: - Shaft end with square 11,1x11,1x11,5 mm 0.44x0.44x0.45" in - For clamping between flanges PN6 ... PN40 - Suitable for intake air/flue gas - Flow rate not linear - Butterfly disc without limit stop - Shaft seal: NBR - Operating pressure: max. 500 mbar 7,25 psi - For pressure ratings PN10 ... PN40, the valve is supplied with mounting sleeves as an installation aid. Suitable for electric actuator 668M2006, 668M2020, 668M2040 with internal square socket 11x11 mm 0.44x0.44" in (IVK11). Incl. fastening material and mounting sleeves. No separate coupling/console is required. The console is part of the damper. As the damper does not have a position indicator, we recommend using an actuator with a position indicator.	668M2200
A10 "INTERNAL DIAMETER"	Selection
INTERNAL DIAMETER DN40	040
INTERNAL DIAMETER DN50	050
INTERNAL DIAMETER DN65	065
INTERNAL DIAMETER DN80	080
INTERNAL DIAMETER DN100	100
INTERNAL DIAMETER DN125	125
INTERNAL DIAMETER DN150	150
INTERNAL DIAMETER DN200	200
A20 "REDUCTION"	Auswahl
WITHOUT	000
DN40 REDUCED TO DN25	025
DN40/DN50 REDUCED TO DN32	032
DN50/DN65 REDUCED TO DN40	040
DN65/DN80 REDUCED TO DN50	050
DN80/DN100 REDUCED TO DN65	065
DN100/DN125 REDUCED TO DN80	080
DN125/DN150 REDUCED TO DN100	100
DN150/DN200 REDUCED TO DN125	125
DN200 REDUCED TO DN150	150
A30 "TEMPERATURE RANGE"	Selection
-20 ... +100 °C -4 ... 212 °F	100
A40 "SEALING OF THE DAMPER DISC"	Selection
NOT TIGHT CLOSING, leakage approx. 1% of Kvs value 90°	0
DAMPER DISC CLOSING TIGHTLY, without leakage	D
A50 "MATERIAL"	Selection
HOUSING ALUMINIUM, DAMPER SHAFT / DAMPER DISC STAINLESS STEEL	AL
A60 "HAND FEED"	Selection
WITHOUT HAND FEED, for mounting on actuator	0
WITH HAND FEED, infinitely adjustable locking lever	H
A70 "LENGTH"	Selection
LENGTH 30 mm	B30
LENGTH 40 mm	B40

Control damper for flue gas / air, up to 450 °C | 842 °F non-linear, without DVGW approval Type 668M2205 Cast Iron.

Technical Data



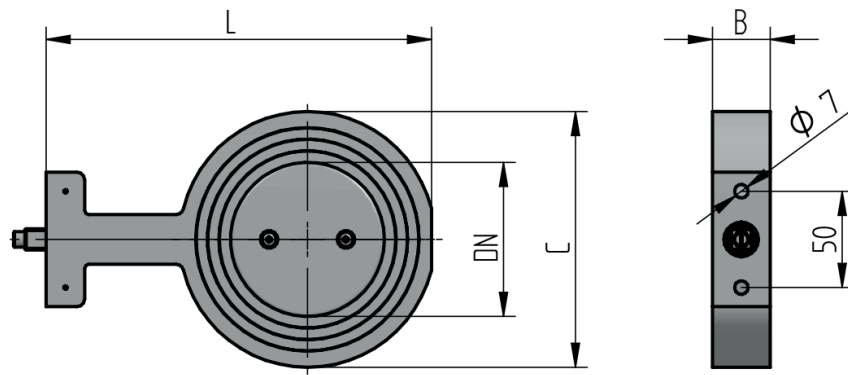
Flue gas air damper 668M2205, cast iron

Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
Mode of operation	for electric actuator 668M2006, 668M2020, 668M2040 with internal square 11,1x11,1 mm 0.44x0.44" in (IVK11)	Mounting position	horizontal to vertical, not hanging downwards
		Medium temperature	-20 ... +450 °C -4 ... 842 °F
Operating pressure	max 500 mbar 7,25 psi	Medium	fluegas/air
Design	Butterfly disc without limit stop Intermediate flange butterfly valve - clamp-in type, flow rate non-linear	Leckage	approx. 1 % of Kv value
Positioning speed	max. 5 s/90°	Material	cast iron

Each damper can be reduced by a maximum of 2 nominal diameters.

Nominal diameters: DN40 ... DN200

Use 662R22V for nominal sizes > DN200.



Control damper for flue gas or air 668M2xxx (all dimensions in mm)

DN	C	B	L	Weight B30	Weight B40
40	77 mm 3.03" in	30 mm 1.18" in	152 mm 5.98" in*	1.56 kg 3.44 lb	
50	87 mm 3.42" in	30 mm 1.18" in	162 mm 6.38" in*	1.75 kg 3.86 lb	
65	105 mm 4.13" in	30 mm 1.18" in	179 mm 7.05" in*	2 kg 4.41 lb	
80	122 mm 4.80" in	30 mm 1.18" in	197 mm 7.75" in*	2.5 kg 5.51 lb	
100	140 mm 5.51" in	30 mm 1.18" in	216 mm 8.50" in*	2.75 kg 6.06 lb	
125	170 mm 6.69" in	35 mm 1.38" in	244 mm 9.60" in*	3.85 kg 8.48 lb	
150	196 mm 7.72" in	40 mm 1.57" in	269 mm 10.59" in*		5.5 kg 12.12 lb
200	256 mm 10.08" in	40 mm 1.57" in	324 mm 12.75" in*		8.5 kg 18.74 lb

* For a temperature range up to 450 °C | 842 °F the dimension increases by 100 mm | 3.94" in

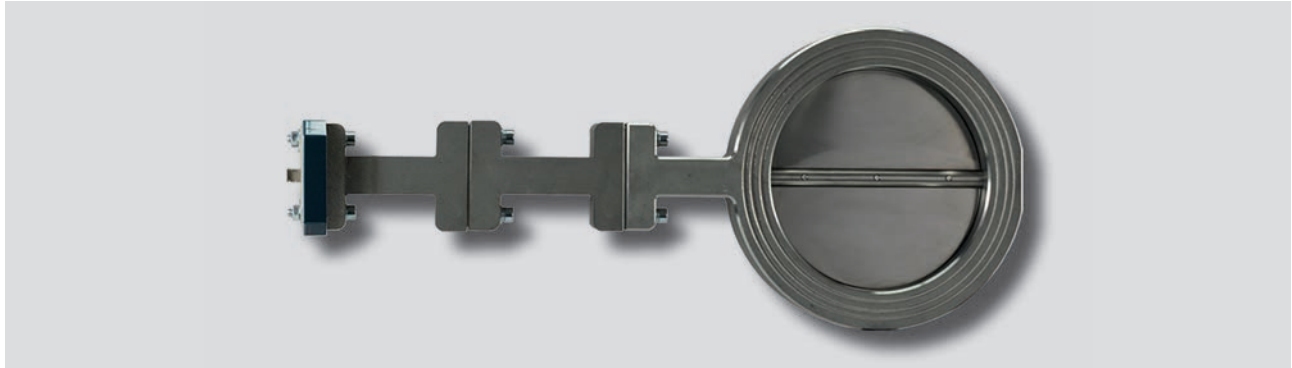
Ordering Information

Flue gas/air damper type SVH Cast Iron up to 450 °C | 842 °F

Description / Type	Order no.
<p>Flue gas/air damper:</p> <ul style="list-style-type: none"> - Shaft end with square 11.1x11.1x11.5 mm 0.44x0.44x0.45" in - For clamping between flanges PN6 ... PN40 - Suitable for intake air/flue gas - Flow rate not linear - Butterfly disc without limit stop - Shaft seal: NBR - Operating pressure: max. 500 mbar 7.25 psi - For pressure ratings PN10 ... PN40, the valve is supplied with mounting sleeves as an installation aid. <p>Suitable for electric actuator 668M2006, 668M2020, 668M2040 with internal square socket 11x11 mm 0.44x0.44" in (IVK11). Incl. fastening material and mounting sleeves. No separate coupling/console is required. The console is part of the damper. As the damper does not have a position indicator, we recommend using an actuator with a position indicator.</p>	668M2205
A10 "INTERNAL DIAMETER"	Selection
INTERNAL DIAMETER DN40	040
INTERNAL DIAMETER DN50	050
INTERNAL DIAMETER DN65	065
INTERNAL DIAMETER DN80	080
INTERNAL DIAMETER DN100	100
INTERNAL DIAMETER DN125	125
INTERNAL DIAMETER DN150	150
INTERNAL DIAMETER DN200	200
A20 "REDUCTION"	Auswahl
Retracted only possible in aluminium or stainless steel!	000
A30 "TEMPERATURE RANGE"	Selection
-20 ... +450 °C -4 ... 842 °F, with temperature lock, length 100 mm	450
A40 "SEALING OF THE DAMPER DISC"	Selection
NOT TIGHT CLOSING, leakage approx. 1% of Kvs value 90°	0
DAMPER DISC CLOSING TIGHTLY, only possible in aluminium or stainless steel!	
A50 "MATERIAL"	Selection
HOUSING CAST IRON, DAMPER SHAFT / DAMPER DISC STAINLESS STEEL	GG
A60 "HAND FEED"	Selection
WITHOUT HAND FEED, for mounting on actuator	0
WITH HAND FEED, infinitely adjustable locking lever	H
A70 "LENGTH"	Selection
LENGTH 30 mm 1.18" in (DN40 ... DN100)	B30
LENGTH 35 mm 1.38" in (DN125)	B35
LENGTH 40 mm 1.57" in (DN150 ... DN200)	B40

Control damper for flue gas / air, up to 650 °C | 1202 °F non-linear, without DVGW approval.

Technical Data



Abgas/Luftklappe 668M2210, Edelstahl

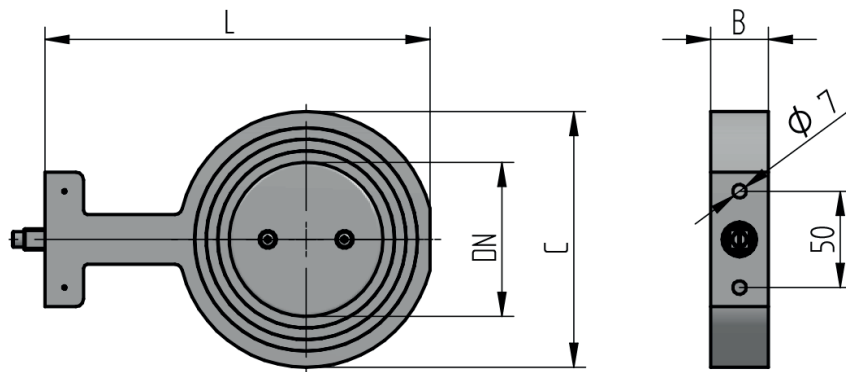
Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
Mode of operation	for electric actuator 668M2006, 668M2020, 668M2040 with internal square 11.1x11.1 mm 0.44x0.44" in (IVK11)	Mounting position	horizontal to vertical, not hanging downwards
		Medium temperature	-20 ... +650 °C -4 ... 1202 °F
Operating pressure	max 500 mbar 7.25 psi	Medium	fluegas/air
Design	Butterfly disc without limit stop Intermediate flange butterfly valve - clamp-in type, flow rate non-linear	Leckage	approx. 1 % of Kv value
Positioning speed	max. 5 s/90°	Material	Stainless steel

Each damper can be reduced by a maximum of 2 nominal diameters.

Nominal diameters: DN40 ... DN200

Nominal diameters > DN200 on request.

Control dampers



Control damper for flue gas or air 668M2xxx (all dimensions in mm)

DN	C	B	L	Weight [kg/B30]	Weight [kg/B40]
40	87 mm 3.42" in	30 mm 1.18" in	155 mm 6.10" in*	1.75 kg 3.86 lb	2.25 kg 4.96 lb
50	97 mm 3.82" in	30 mm 1.18" in	165 mm 6.50" in*	2 kg 4.41 lb	2.25 kg 4.96 lb
65	117 mm 4.60" in	30 mm 1.18" in	183 mm 7.20" in*	2.5 kg 5.51 lb	3.2 kg 7.05 lb
80	133 mm 5.24" in	30 mm 1.18" in	201 mm 7.91" in*	3 kg 6.61 lb	3.8 kg 8.38 lb
100	153 mm 6.02" in	30 mm 1.18" in	221 mm 8.70" in*	3.4 kg 7.50 lb	4.4 kg 9.70 lb
125	183 mm 7.20" in	30 mm 1.18" in	248 mm 9.76" in*	4.4 kg 9.70 lb	5.65 kg 12.46 lb
150	208 mm 8.19" in	30 mm 1.18" in	273 mm 10.75" in*	5.2 kg 11.46 lb	6.6 kg 14.55 lb
200	256 mm 10.08" in	40 mm 1.57" in	324 mm 12.75" in*		10.1 kg 22.27 lb

* For a temperature range up to 650 °C | 1202 °F the dimension increases by 200 mm | 7.87" in

Ordering Information

Configuration incl. console, coupling and assembly to actuator*

662R22V-	A 10 INTERNAL DIAMETER	A 20 REDUCTION	A 30 APPLICATION
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A 10 – INTERNAL DIAMETER	Selection.
INTERNAL DIAMETER DN250, PN6	250
INTERNAL DIAMETER DN300, PN6	300
INTERNAL DIAMETER DN350, PN6	350
INTERNAL DIAMETER DN400, PN6	400
INTERNAL DIAMETER DN450, PN6	450
INTERNAL DIAMETER DN500, PN6	500
A 20 – REDUCTION	Selection
WITHOUT REDUCTION	000
REDUCED TO SPECIFICATION BY CUSTOMER	—
A 30 – APPLICATION	Selection
Flue gas/air up to 450 °C 842 °F	450
Flue gas/air up to 650 °C 1202 °F	650

* Actuator must be ordered separately, following information are indicative at a difference pressure of 0,1bar | 1,45 psi:

DN250 40 Nm Type 662R2121 or 668M2040 with 12 mm | 0.47" in shaft

DN300 ... DN450 90 Nm Type 662R2123

DN500 140 Nm Type 662R2124

Mounting for Flue gas/air volume control damper, 662R22

A 10 „MONTAGE“	Selection
FOR MOUNTING ON SHAFT 12 mm 0.47" in WITH PARALLEL KEY 4x4 mm 0.16x0.16" in, INCL. THERMAL DECOUPLING	— 25
FOR MOUNTING ON SHAFT 20 mm 0.79" in WITH PARALLEL KEY 6x6 mm 0.24x0.24" in, INCL. THERMAL DECOUPLING	— 26

Ordering Information

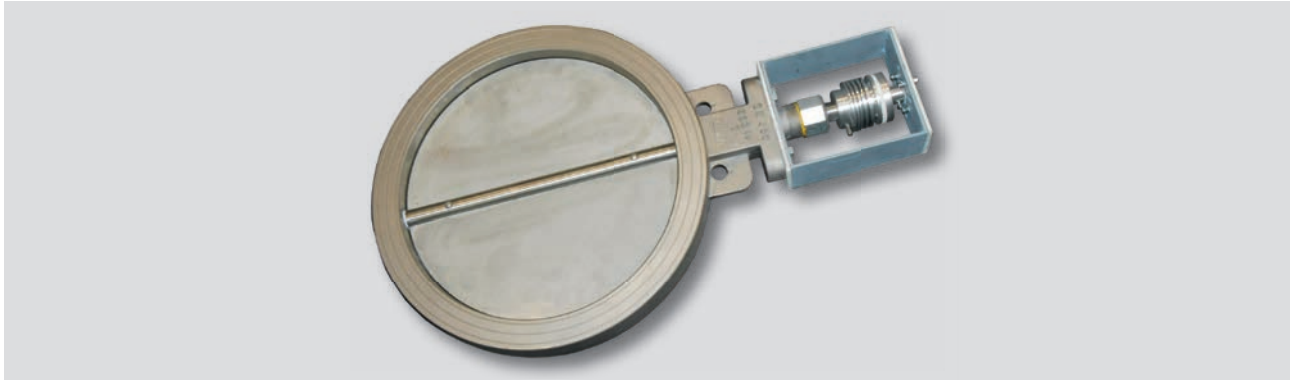
Damper type SVHT stainless steel up to 100 °C | 212 °F, 450 °C | 842°F, 650 °C | 1202°F

Description / Type	Order no.
Flue gas/air damper: - Shaft end with square 11.1x11.1x11.5 mm 0.44x0.44x0.45" in - For clamping between flanges PN6 ... PN40 - Suitable for intake air/flue gas - Flow rate not linear - Butterfly disc without limit stop - Operating pressure: max. 500 mbar 7,25 psi - For pressure ratings PN10 ... PN40, the valve is supplied with mounting sleeves as an installation aid Suitable for electric actuator 668M2006, 668M2020, 668M2040 with internal square socket 11x11 mm 0.44x0.44" in (IVK11). Incl. fastening material and mounting sleeves. No separate coupling/console is required. The console is part of the damper. As the damper does not have a position indicator, we recommend using an actuator with a position indicator.	668M2210
A10 "INTERNAL DIAMETER"	Selection
INTERNAL DIAMETER DN40	040
INTERNAL DIAMETER DN50	050
INTERNAL DIAMETER DN65	065
INTERNAL DIAMETER DN80	080
INTERNAL DIAMETER DN100	100
INTERNAL DIAMETER DN125	125
INTERNAL DIAMETER DN150	150
INTERNAL DIAMETER DN200	200
A20 "REDUCTION"	Auswahl
WITHOUT	000
DN40 REDUCED TO DN25	025
DN40/DN50 REDUCED TO DN32	032
DN50/DN65 REDUCED TO DN40	040
DN65/DN80 REDUCED TO DN50	050
DN80/DN100 REDUCED TO DN65	065
DN100/DN125 REDUCED TO DN80	080
DN125/DN150 REDUCED TO DN100	100
DN150/DN200 REDUCED TO DN125	125
DN200 REDUCED TO DN150	150
A30 "TEMPERATURE RANGE"	Selection
-20 ... +100 °C -4 ... 212 °F, without temperature barrier	100
-20 ... +450 °C -4 ... 842 °F, with temperature barrier, Länge 100 mm 3.94" in	450
-20 ... +650 °C -4 ... 1202 °F, with temperature barrier, Länge 200 mm 7.87" in	650
A40 "SEALING OF THE DAMPER DISC"	Selection
NOT TIGHT CLOSING, leakage approx. 1% of Kvs value 90°	0
DAMPER DISC CLOSING TIGHTLY, without leakage	D
A50 "MATERIAL"	Selection
HOUSING STAINLESS STEEL, DAMPER SHAFT / DAMPER DISC STAINLESS STEEL	E

A60 "HAND FEED"	Selection
WITHOUT HAND FEED, for mounting on actuator	0
WITH HAND FEED, infinitely adjustable locking lever	H
A70 "LENGTH"	Selection
LENGTH 30 mm 1.18" in	B30
LENGTH 40 mm 1.57" in	B40

Control damper for flue gas / air, up to 450 °C | 842°F non-linear, without DVGW approval from DN250 Type 662R22V.

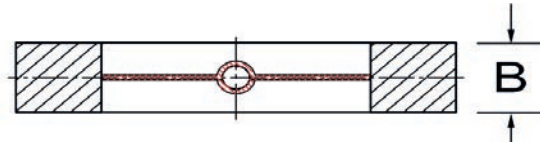
Technical Data



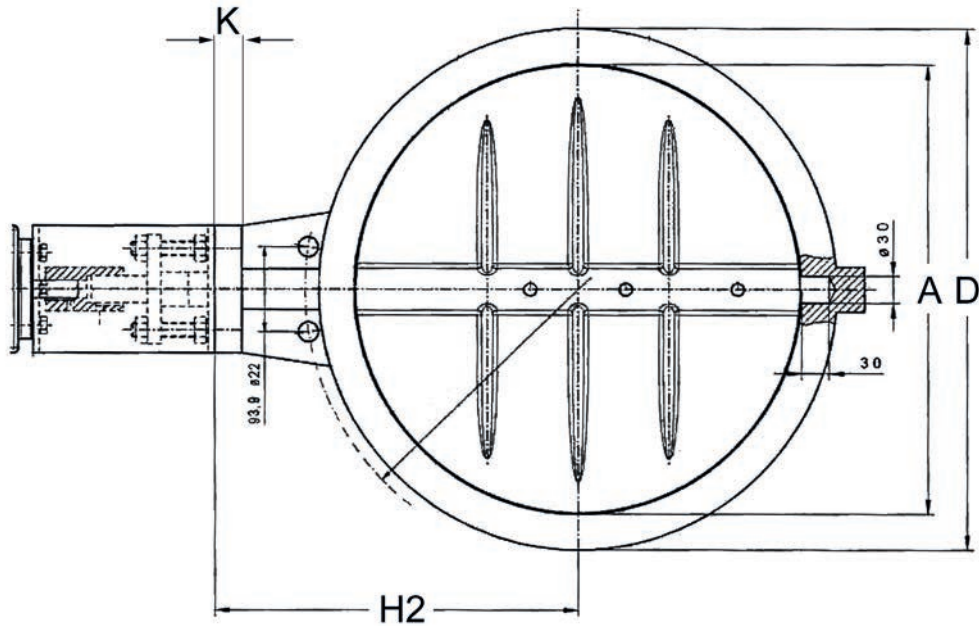
Flue gas/air damper

Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
Mode of operation	for electric actuator	Mounting position	any
Design	Intermediate flange butterfly valve - clamp-in type,	Medium temperature	max. 450 °C 842°F
Leckage	approx. 1 % of Kv value	Medium	fluegas/air

Illustrations and technical data refer to the standard version.



Butterfly plate (flow, not linear)



Dimension drawing Control damper for flue gas / air (all dimensions in mm)

DN	A	D	B	H2	Welle	k
250	248 mm 9.76" in	316 mm 12.44" in	40 mm 1.57" in	220 mm 8.66" in	16 mm 0.63" in	22 mm 0.87" in
300	298 mm 11.73" in	367 mm 14.45" in	46 mm 1.81" in	250 mm 9.84" in	20 mm 0.79" in	25 mm 0.98" in
350	337 mm 13.27" in	417 mm 16.42" in	46 mm 1.81" in	275 mm 10.83" in	20 mm 0.79" in	25 mm 0.98" in
400	387 mm 15.24" in	468 mm 18.42" in	51 mm 2.00" in	305 mm 12.01" in	25 mm 0.98" in	25 mm 0.98" in
450	438 mm 17.24" in	525 mm 20.67" in	51 mm 2.00" in	330 mm 12.99" in	25 mm 0.98" in	25 mm 0.98" in
500	489 mm 19.25" in	571 mm 22.48" in	51 mm 2.00" in	357 mm 14.05" in	25 mm 0.98" in	25 mm 0.98" in

Ordering Information

Configuration incl. console, coupling and assembly to actuator*

668R22V-	A 10 INTERNAL DIAMETER	A 20 REDUCTION	A 30 APPLICATION
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A 10 - INTERNAL DIAMETER	Selection.
INTERNAL DIAMETER DN250, PN6	250
INTERNAL DIAMETER DN300, PN6	300
INTERNAL DIAMETER DN350, PN6	350
INTERNAL DIAMETER DN400, PN6	400
INTERNAL DIAMETER DN450, PN6	450
INTERNAL DIAMETER DN500, PN6	500

A 20 - REDUCTION	Selection
WITHOUT REDUCTION	000
REDUCED TO SPECIFICATION BY CUSTOMER	—

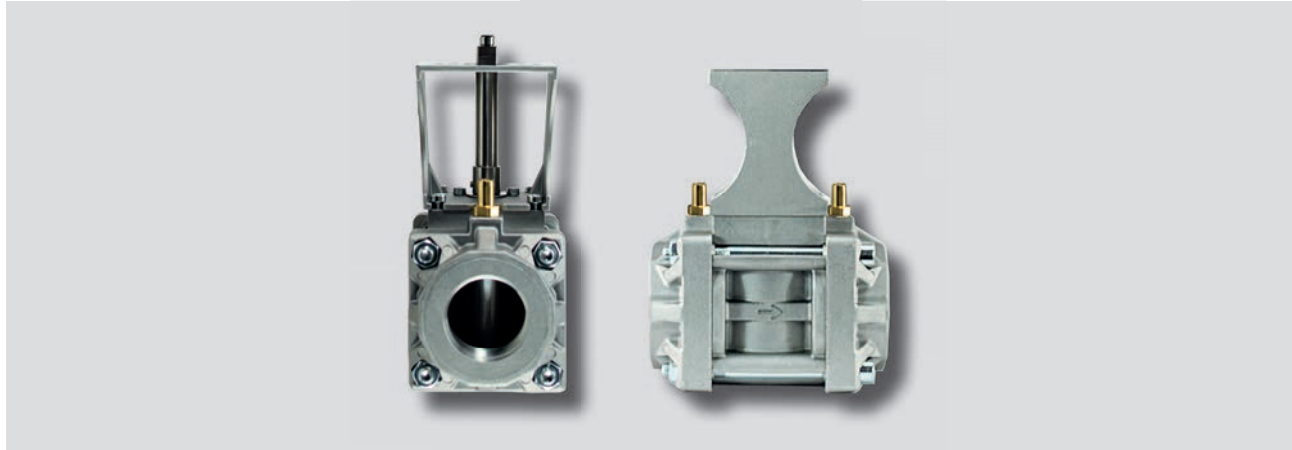
A 30 - APPLICATION	Selection
Flue gas/air up to 450 °C 842 °F	450
Flue gas/air up to 550 °C 1022 °F	550

* Actuator must be ordered separately, following information are indicative at a difference pressure of 0,1bar | 1,45 psi:

DN200 ... DN250 40 Nm Type 662R2121
 DN300 ... DN450 90 Nm Type 662R2123
 DN500 140 Nm Type 662R2123

Gas Control Valve Type SVL 668M2400.

Technische Daten



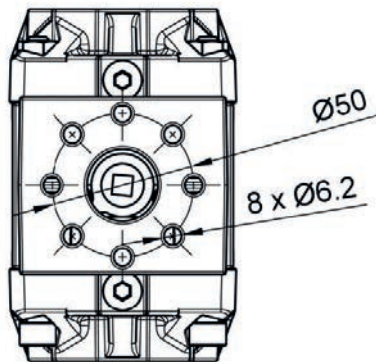
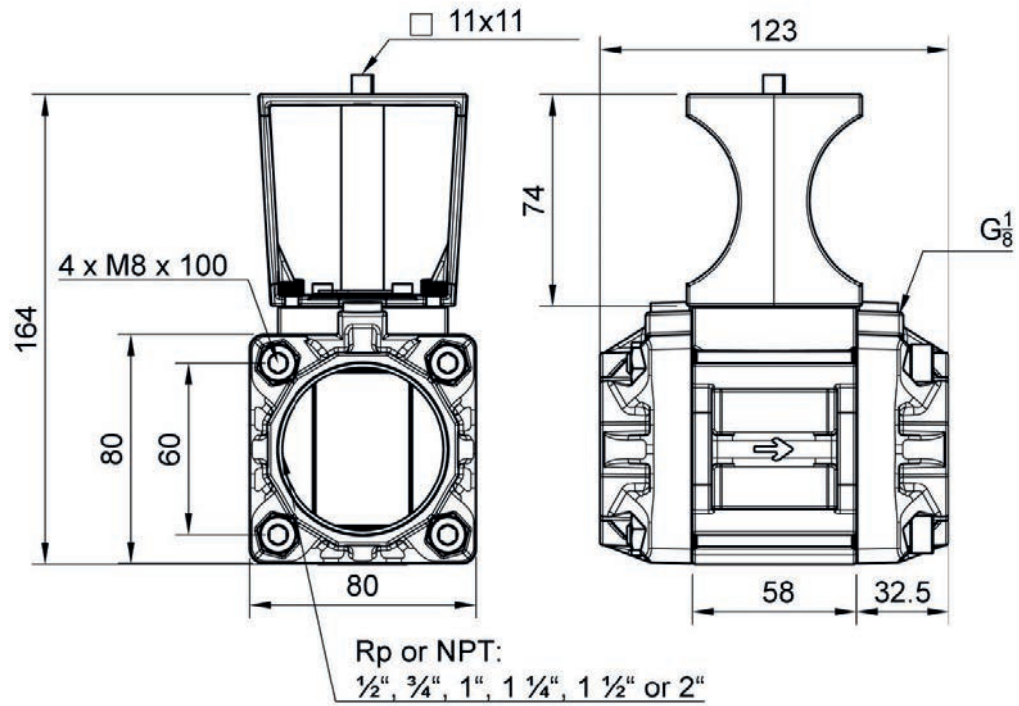
Gasstellglied SVL

Usage	As actuator for process control in combustion technology	Dimensions [mm]	see dimension drawing
		Mounting position	horizontal to vertical, not hanging downwards
Mode of operation	for electric actuator 668M2006, 668M2020, with internal square 11.1x11.1 mm 0.44x0.44" in (IVK11)	Medium temperature	-20 ... +60 °C -4 ... 140 °F
Operating pressure	max. 50 kPa (500 mbar) 7.25 psi	Medium	for gases of gas families 1, 2, 3 and other neutral gaseous media. Suitable for gases up to max. 0.1 vol. % H ₂ S*, hydrogen
Design	For screwing into the pipeline. Connection range Rp or NPT 1/2" ... 2"		
Positioning speed	max. 1,5 s/90°	Flow	up to DN40 linear, DN50 roughly linear
Anschluss	Rp oder NPT Gewinde	Material	Aluminium

*Gas must be dry under all circumstances and must not condense.

Nominal diameter: DN8 ... DN50

Gas Control Valve Type SVL



Dimension drawing Gas Control Valve Type SVL 668M2400 (all dimensions in mm)

Ordering Information

668M2400	A 10 INTERNAL DIAMETER	A 20 GAS CONNECTION	A 30 DIRECTION OF ROTATION
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A10 "INTERNAL DIAMETER"	Selection
INTERNAL DIAMETER DN08 - LINEAR	08
INTERNAL DIAMETER DN15 - LINEAR	15
INTERNAL DIAMETER DN20 - LINEAR	20
INTERNAL DIAMETER DN25 - LINEAR	25
INTERNAL DIAMETER DN32 - LINEAR	32
INTERNAL DIAMETER DN40 - LINEAR	40
INTERNAL DIAMETER DN50 - NOT LINEAR	50
A20 "GAS CONNECTION"	Selection
GAS CONNECTION INTERNAL THREAD Rp 1/2"	R12
GAS CONNECTION INTERNAL THREAD Rp 3/4"	R34
GAS CONNECTION INTERNAL THREAD Rp 1"	R1
GAS CONNECTION INTERNAL THREAD Rp 1 1/4"	R114
GAS CONNECTION INTERNAL THREAD Rp 1 1/2"	R112
GAS CONNECTION INTERNAL THREAD Rp 2"	R2
GAS CONNECTION INTERNAL THREAD NPT 1/2"	N12
GAS CONNECTION INTERNAL THREAD NPT 3/4"	N34
GAS CONNECTION INTERNAL THREAD NPT 1"	N1
GAS CONNECTION INTERNAL THREAD NPT 1 1/4"	N114
GAS CONNECTION INTERNAL THREAD NPT 1 1/2"	N112
GAS CONNECTION INTERNAL THREAD NPT 2"	N2
A30 "DIRECTION OF ROTATION"	Selection
FOR CLOCKWISE ROTATING ACTUATORS	R
A40 "HAND FEED"	Selection
WITHOUT HAND FEED, for mounting on actuator	0
WITH HAND FEED, infinitely adjustable locking lever	H





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