



VAT Vakuumentile AG
CH-9469 Haag, Schweiz

Product data sheet

Series 210, DN 63 – 160 (2½" - 6")

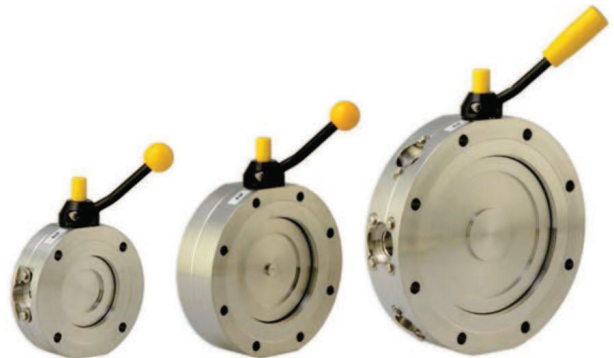
Ordering No. 210..-PE06-000.

Butterfly Valve

Manual actuator with hand lever

Advantages

- Three sizes available:
DN 63, 100, 160 with ISO-F flanges
- All vacuum parts made of stainless steel
- Robust and compact design with low installation height
- High conductance
- Lateral vacuum connections for gauges and valves are standard
- Long cycle life



Created by: T. Eugster	Release date: 2013-09-02	1 of 3
Modified by:	Release date:	602411EA



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Series 210, DN 63 – 160 (2½" - 6")

Ordering No. 210..-PE06-000.

Ordering Information

Selection Data

Vacuum connection		DN 63 ISO-F	DN 100 ISO-F	DN 160 ISO-F
Material				
body	AISI / DIN	304 / 1.4301	304 / 1.4301	304 / 1.4301
shaft, valve plate	AISI / DIN	304 / 1.4301	304 / 1.4301	304 / 1.4301
Lateral vacuum connections		1 x DN 10 ISO-KF 1 x DN 16 ISO-KF	2 x DN 10 ISO-KF 1 x DN 25 ISO-KF	2 x DN 10 ISO-KF 1 x DN 25 ISO-KF

Butterfly Valve

Type	21036-PE06-000.	21040-PE06-000.	21044-PE06-000.

Specifications

Cycle life	cycles	100 000 ¹⁾	100 000 ¹⁾	100 000 ¹⁾
Conductance for molecular flow	l/s	350	1000	3400
Leak rate	mbar l/s	1×10 ⁻⁹	1×10 ⁻⁹	1×10 ⁻⁹
Pressure range	mbar / bar min / max	1×10 ⁻⁸ / 4 (abs)	1×10 ⁻⁸ / 4 (abs)	1×10 ⁻⁸ / 4 (abs)
Diff. pressure on the plate in either direction	bar	4 ²⁾	4 ²⁾	4 ²⁾
Diff. pressure at opening	bar	4	4	4
Bakeout temp body	°C	150	150	150
Seals		FKM	FKM	FKM
Weight	kg	3.1	5.2	9.3

Spare Parts

Seal kit	579965	580187	580255
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Accessories

Connections elements	580672	580691	580706
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¹⁾ Cycle life tested at room temperature and under clean and static conditions. Expandable parts are excluded

²⁾ Opening above atmospheric pressure reduces specified cycle life



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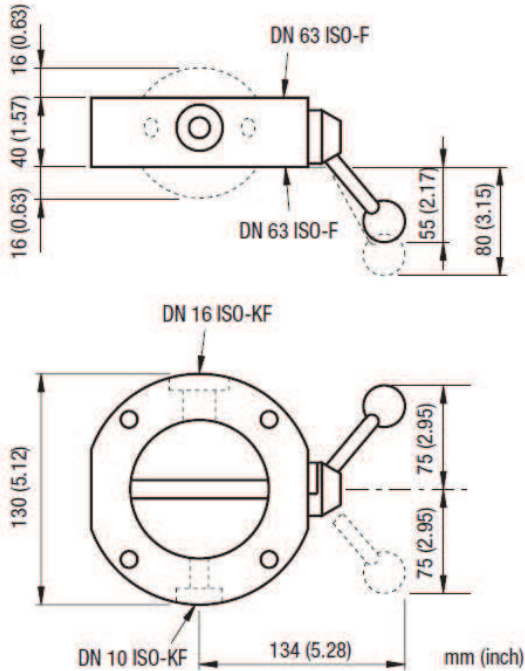
Product data sheet

Series 210, DN 63 – 160 (2½" - 6")

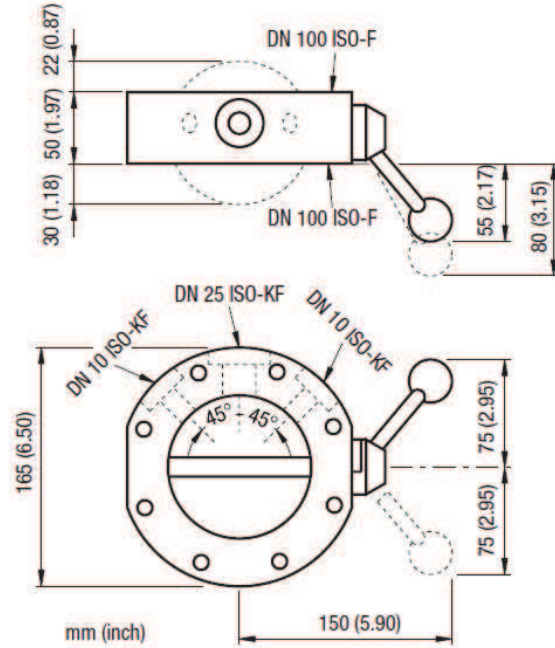
Ordering No. 210..-PE06-000.

Dimensions

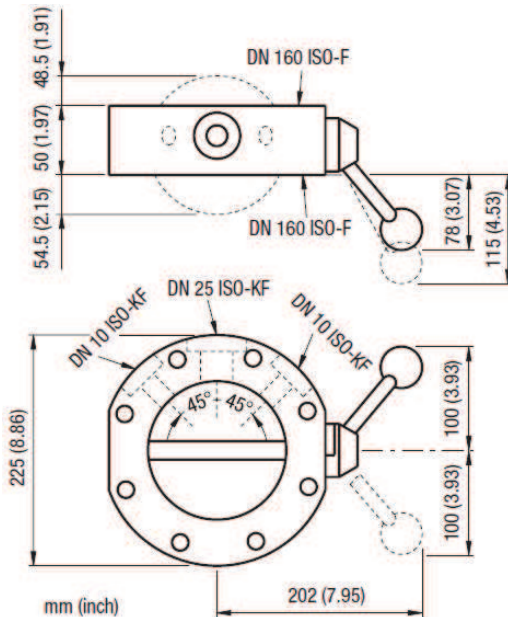
DN 63 ISO-F



DN 100 ISO-F



DN 160 ISO-F





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CH-9469 Haag, Schweiz

Product data sheet

Series 210, DN 63 – 250 (2½" – 10")

Ordering No. 210...E14-....

Butterfly Valve

**Pneumatic actuator, double acting,
without position indicator,
without solenoid valve**

Advantages

- Four sizes available:
DN 63, 100, 160, with ISO-F flanges
DN 250 with ISO-K flanges
- All vacuum parts made of stainless steel
- Robust and compact design with low installation height
- High conductance
- With or without lateral vacuum connections for gauges and valves
- Extremely long cycle life
- Direct pneumatic actuation or via solenoid valve
- Solenoid valve available as accessories
- Electrical and visual position indicator available as accessories



Created by: T. Eugster	Release date: 2013-08-09	1 of 5
Modified by: T. Eugster	Release date: 2013-08-22	602412EB



VAT Vakuumentile AG
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Product data sheet

Series 210, DN 63 – 250 (2½" – 10")

Ordering No. 210...E14-....

Ordering Information

Selection Data

Vacuum connection		DN 63 ISO-F	DN 100 ISO-F	DN 160 ISO-F	DN 250 ISO-K
Body, shaft, valve plate	AISI / DIN	304 / 1.4301	304 / 1.4301	304 / 1.4301	304 / 1.4301
Lateral vacuum connections		1 x DN 10 ISO-KF 1 x DN 16 ISO-KF	2 x DN 10 ISO-KF 1 x DN 25 ISO-KF	2 x DN 10 ISO-KF 1 x DN 25 ISO-KF	2 x DN 10 ISO-KF 1 x DN 25 ISO-KF 1 x DN 40 ISO-KF

Butterfly Valve

With lateral vacuum connections					
X Type		21036-PE14-000.	21040-PE14-000.	21044-PE14-000.	21048-QE14-000.
Without lateral vacuum connections					
Z Type		21036-PE14-ABA.	21040-PE14-ABA.	21044-PE14-ABA.	21048-QE14-ABA.

Specifications

Cycle life	cycles	1.0 Mio ¹⁾	1.5 Mio ¹⁾	1.5 Mio ¹⁾	1.0 Mio ¹⁾
Conductance for molecular flow					
X Type	l/s	350	1000	3400	8200
Z Type	l/s	400	1400	4000	8200
Leak rate	mbar l/s	1×10 ⁻⁹	1×10 ⁻⁹	1×10 ⁻⁹	1×10 ⁻⁹
Pressure range	mbar / bar min / max	1×10 ⁻⁸ / 4 (abs)	1×10 ⁻⁸ / 4 (abs)	1×10 ⁻⁸ / 4 (abs)	1×10 ⁻⁸ / 4 (abs)
Diff. pressure at opening	bar	4 ²⁾	4 ²⁾	4 ²⁾	4 ²⁾
Diff pressure in the plate in either direction	bar	4	4	4	4
Bakeout temp body	°C	150	150	150	150
Seals		FKM	FKM	FKM	FKM
Weight					
X Type	kg	3.8	6.5	10	15.7
Z Type	kg	3.5	5	8	16

Spare Parts

Seal kit					
X Type		579965	580187	580255	580280
Z Type		579980	580400	580259	580280
Actuator		587851	587852	587852	580617

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²⁾ Opening above atmospheric pressure reduces specified cycle life



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Product data sheet

Series 210, DN 63 – 250 (2½" – 10")

Ordering No. 210...E14-....

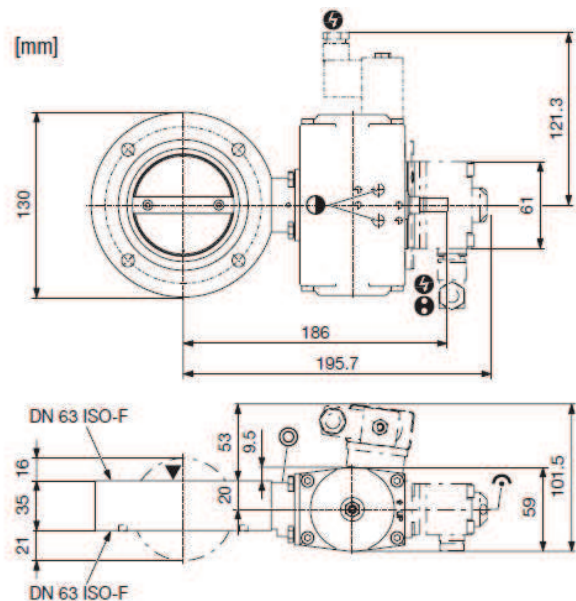
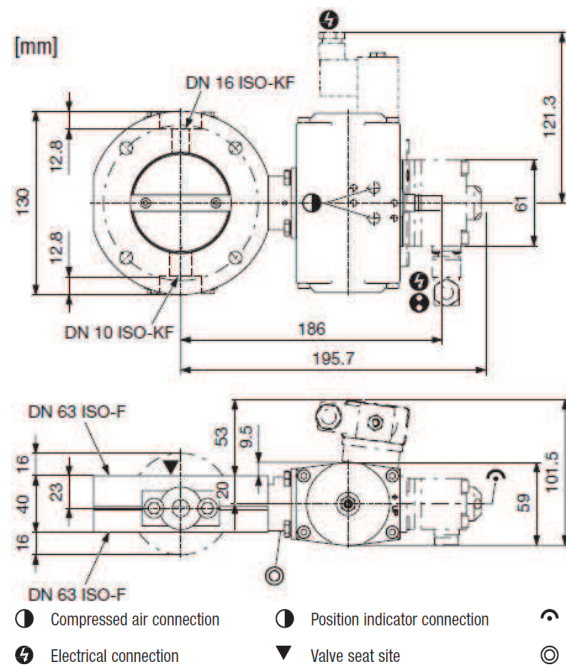
Accessories

Vacuum connection	DN 63 ISO-F	DN 100 ISO-F	DN 160 ISO-F	DN 250 ISO-K
Position indicator	587850	587850	587850	587850
Solenoid valve				
220/230 V AC; 50Hz	586579	586579	586579	586579
110/115 V AC; 60Hz	586580	586580	586580	586580
24 V AC; 50Hz	586581	586581	586581	586581
24 V DC	586582	586582	586582	586582
Set of connection elements				
X Type	580672	580691	580706	12 × 32036-QNKS-0001
Z Type	580683	580701	580723	12 × 32036-QNKS-0001

Dimensions

DN 63 / X Type

DN 63 / Z Type





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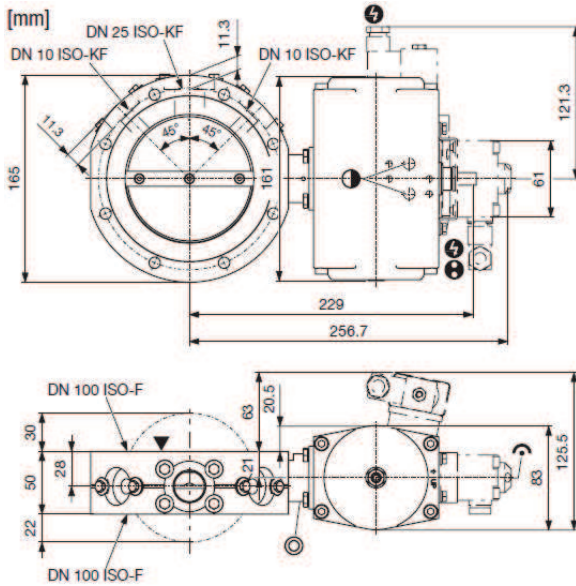
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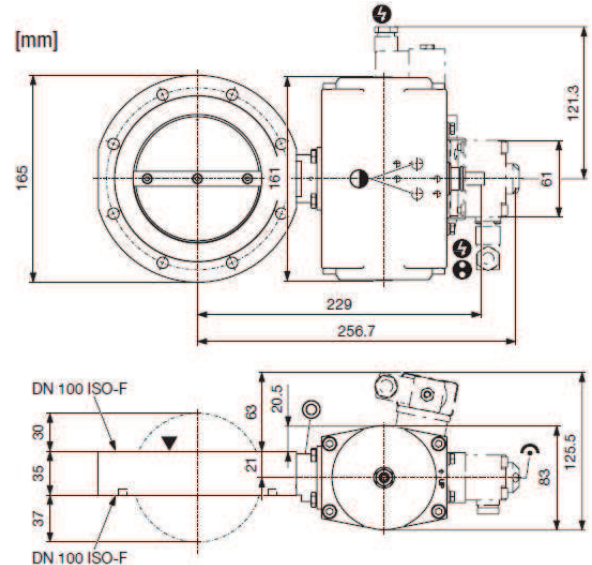
Ordering No. 210...E14-....

Dimensions

DN100 / X Type



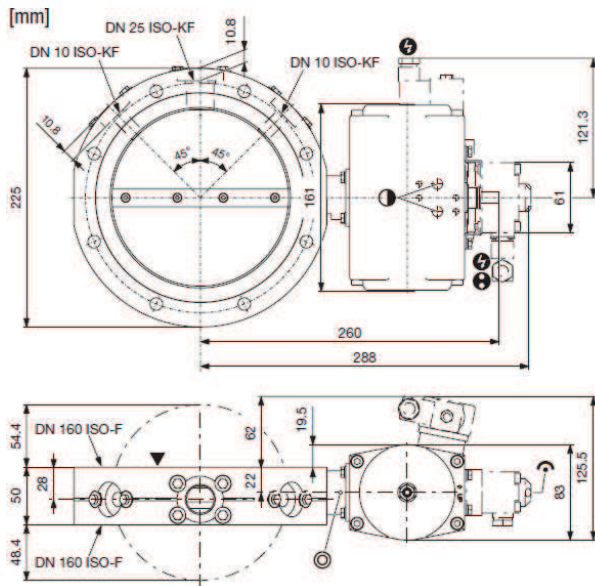
DN 100 / Z Type



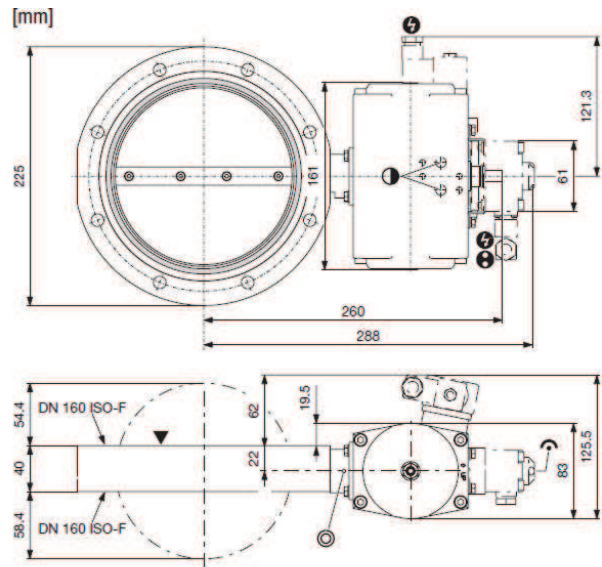
- ⓘ Compressed air connection
- Ⓜ Position indicator connection
- 👁 Visual position indicator
- ⚡ Electrical connection
- ▼ Valve seat site
- ⊙ Leak detection opening

Dimensions

DN 160 / X Type



DN 160 / Z Type



- ⓘ Compressed air connection
- Ⓜ Position indicator connection
- 👁 Visual position indicator
- ⚡ Electrical connection
- ▼ Valve seat site
- ⊙ Leak detection opening



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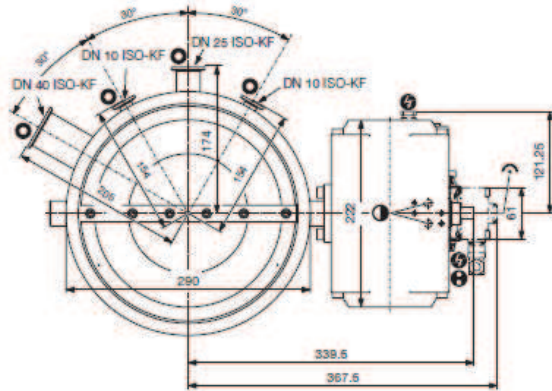
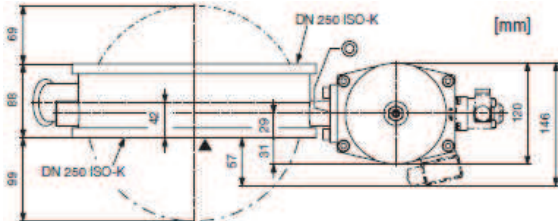
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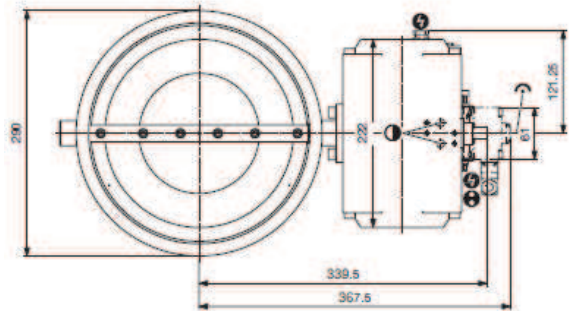
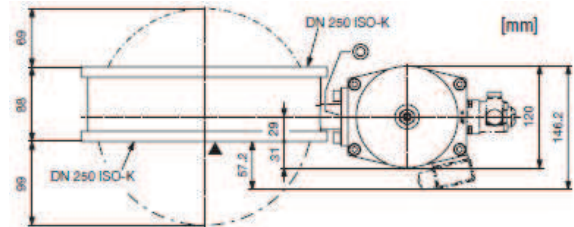
Ordering No. 210...E14-....







Dimensions

DN 250 / X Type



DN 250 / Z Type



-  Compressed air connection
-  Position indicator connection
-  Visual position indicator
-  Electrical connection
-  Valve seat site
-  Leak detection opening



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Product data sheet

Series 210, DN 250 (10")

Ordering No. 21048-PE.4-ABE.

Butterfly Valve

**Pneumatic actuator, double acting,
with position indicator,
with or without solenoid valve 24 VDC**

Advantages

- Extended body for direct mounting
- All vacuum parts made of stainless steel
- Strengthened DN250 body with ISO-F flanges for high torque application
- High conductance
- Extremely long cycle life
- Direct pneumatic actuation or via solenoid valve
- Electrical and visual position indicator



Created by: T. Eugster	Release date: 2013-08-09	1 of 3
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Product data sheet

Series 210, DN 250 (10")

Ordering No. 21048-PE.4-ABE.

Ordering Information

Selection Data

Vacuum connection		DN 250 ISO-F
Body, shaft, plate	AISI / DIN	304 / 1.4301

Butterfly Valve

With position indicator		21048-PE24-ABE.
With position indicator and 24 VDC solenoid valve		21048-PE44-ABE.

Specifications

Cycle life	cycles	1.0 Mio ¹⁾
Conductance for molecular flow	l/s	8200
Leak rate	mbar l/s	1×10^{-9}
Pressure range		1×10^{-8} / 4 (abs)
Diff pressure on the plate in either direction	bar	4
Diff. pressure at opening	bar	4 ²⁾
Body without screws	kNm	≤50
Bakeout temperature body	°C	150
Seals		FKM
Weight	kg	≈36

Spare Parts

Seal kit		580291
Actuator		580617
Position indicator		587850
Solenoid valve 24 VDC		586582

¹⁾ Cycle life tested at room temperature and under clean and static conditions. Expandable parts are excluded

²⁾ Opening above atmospheric pressure reduces specified cycle life



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Product data sheet

Series 210, DN 250 (10")

Ordering No. 21048-PE.4-ABE.

Dimensions

[mm]

