

2-way flange ball valve, article 465-GS with electrical actuator

Diameter DN 15 up to DN 50 pressure range PN 10 / PN 16 / PN 40
 Diameter DN 65 up to DN 200 pressure range PN 40



2-way flange ball valve designed for industrial use. High-quality processing and diverse qualifications enable a wide range of applications. Version as 2-part, flanged housing, pressure range depends on nominal diameter up to 40,0 bar. Full bore, floating ball, both sides 100% tight closing. Shaft seal consisting of multilayer graphite rings, preloaded and self-adjusting by Belleville washers and additional FKM O-ring.

Suitable for gaseous and liquid media, for the steam area ball seals made of R-PTFE (TFM 4215) are available. In any case, the material resistance cast steel GP240GH must be observed.

- both sides flange connection according to DIN EN 1092-1, form B pressure class PN 10 / PN 16 / PN 40, from nominal diameter DN 65 PN 40
- ball above with pressure compensation bore
- ISO 5211 mounting flange for actuators (direct mounting)

Operation optionally with lever (lockable), pneumatic or electrical actuator. Unit (ball valve / actuator) is mounted ready for connection including functional test.

	TÜV TA-Luft certified
	Antistatic design ATEX 94/9/EC
	0035
	Safety Integrity Level (IEC 61508)
	API 607/5
	ambient -10° C ... +80° C
	medium -10° C ... +200° C

- Design Standard DIN EN 12516-1
- Housing strength DIN EN 12516-2
- Design pressure PN 10 / PN 16
- Marking EN 19, MSS SP-25
- Examination / test DIN EN 12266 P10 / P11 / P12
- Housing cast AD 2000-Merkblatt W0 (TÜV)

Operating-variants:

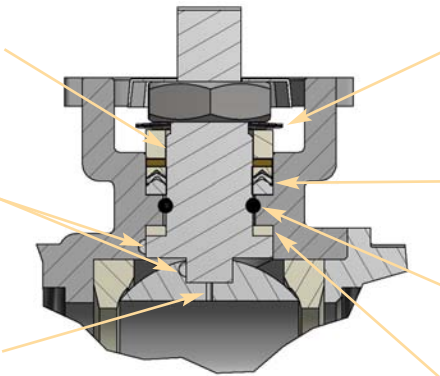


shaft sealing according to VDI 2440 (TA-Luft)

Operating stem is inserted into the body shaft from inside. This guarantees blow-out safety stem.

ATEX-antistatic, the ball-stem connection and the stem-body connection have an anti-static feature, which ensures electrical continuity contact between those parts. As a result, the ball valve complies with the ATEX Directive 2014/34/EU (Ex II 2 G/D Ex-c II)

The highly polished solid ball has a **pressure relief hole** in the stem slot in order to avoid pressure build-up in the body cavity. This ensures a right shutoff and a long service life



Disc springs ensure the permanent pretensioning of the chevron ring set.

primary shaft seal 3-ply V-ring chevron packing set (PTFE)

secondary shaft seal (O-ring FPM)

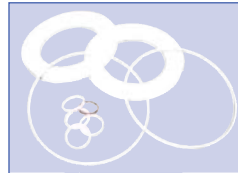
tertiary shaft feedthrough (PTFE sealing washer)

ENG_465-GS_AQ_AQL_2021_Rev. 01

2-way flange ball valve, article 465-GS with electrical actuator

Diameter DN 15 up to DN 50 pressure range PN 10 / PN 16 / PN 40

Diameter DN 65 up to DN 200 pressure range PN 40

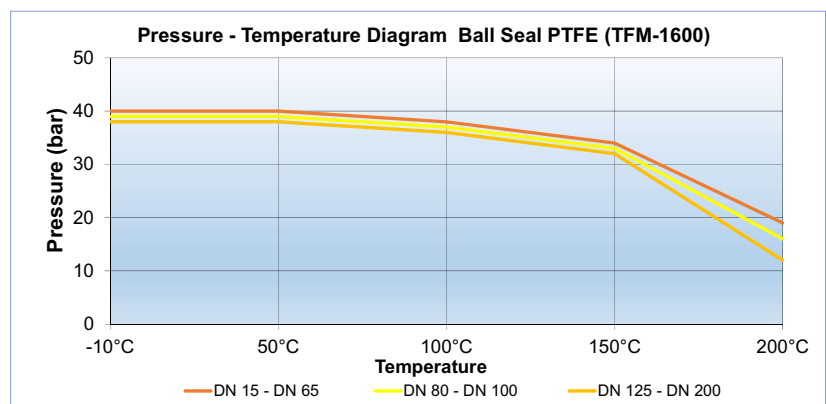


Seal kit (standard),

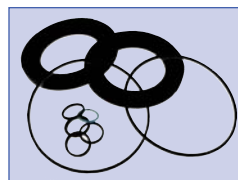
consisting of:

Pos.	Description	Material
4	ball seal (2x)	PTFE (TFM-1600)
8	thrust ring	PTFE
9	O-ring	FKM (Viton)
10	chevron packing set	graphite (3-parts)
12	thrust ring	stainless steel 1.4401
21	body seal	stainless steel-graphite-PTFE

**Seal kit PTFE TFM 1600
(standard)**



Diameter	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
Art.-No. 215.7881.18._	11	13	15	18	19	21	24	25	27	28	29	31

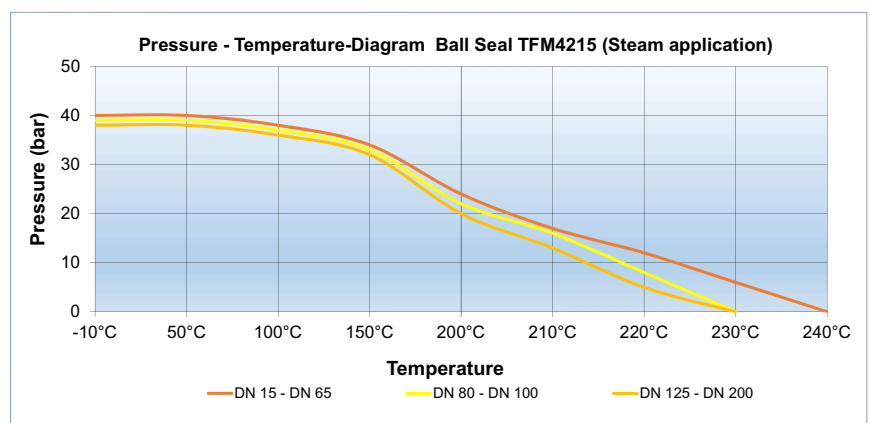


Seal kit for the steam sector,

Tmax. 240° C, consisting of:

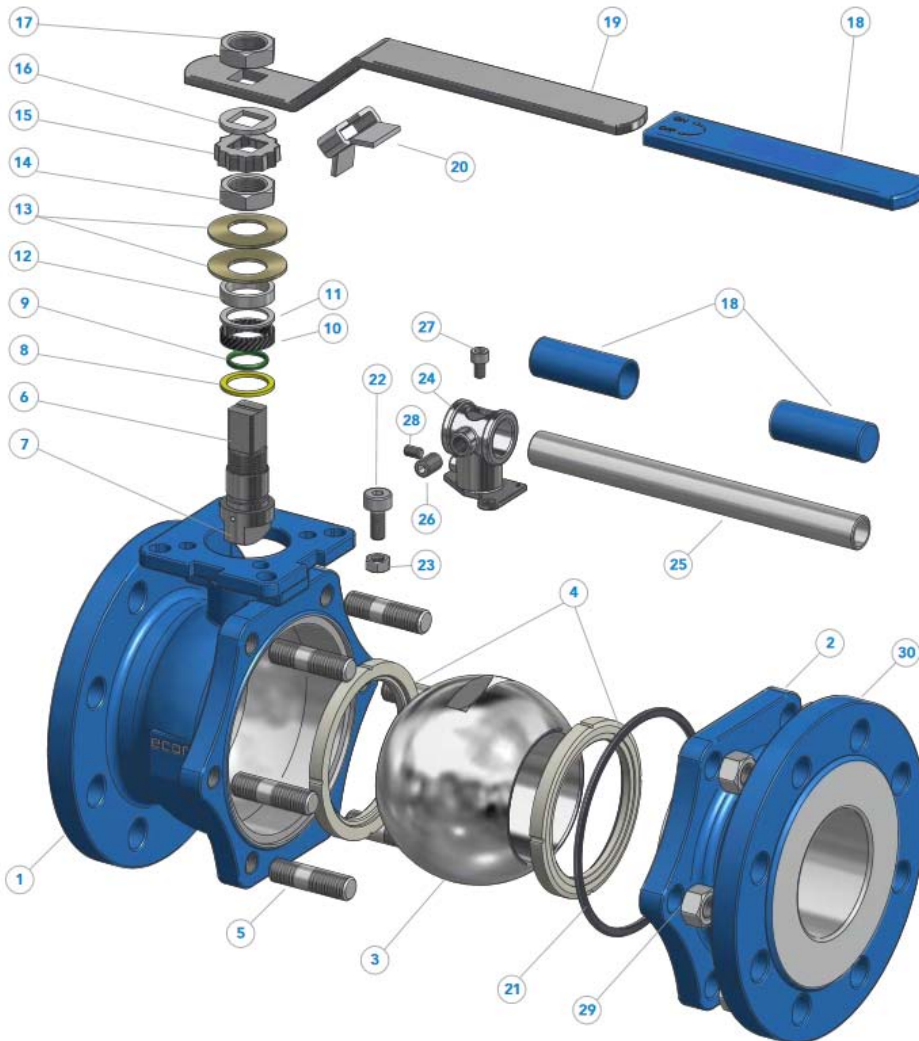
Pos.	Description	Material
4	ball seal (2x)	R-PTFE (TFM-4215)
8	thrust ring	PTFE
9	O-ring	FKM (Viton)
10	chevron packing set	graphite (3-parts)
12	pressure ring	stainless steel 1.4401
21	body seal	stainless steel-graphite-PTFE

Seal kit TFM 4215



Diameter	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
Art.-No. 215.7883.46._	11	13	15	18	19	21	24	25	27	28	29	31

2-way flange ball valve, article 465-GS



Diámetro	Ø d	KV
DN 15	15,0 mm	15,5
DN 20	20,0 mm	31,0
DN 25	25,0 mm	41,3
DN 32	32,0 mm	80,0
DN 40	38,0 mm	141,9
DN 50	50,0 mm	178,0
DN 65	63,5 mm	387,0
DN 80	76,0 mm	670,8
DN 100	100,0 mm	1.169,6
DN 125	125,0 mm	1.462,0
DN 150	150,0 mm	2.236,0
DN 200	200,0 mm	3.612,0

Pos.	Description	Material	Pos.	Description	Material
1	body with ISO top flange	cast steel 1.6019 (GP240GH) with epoxy coating	2	body end	cast steel 1.6019 (GP240GH) with epoxy coating
3	ball	stainless steel 1.4308	4	seat ring	PTFE profile shells (TFM 1600)
5	stud	steel 1.7225	6	stem	stainless steel 1.4301
7	Anti-static device	stainless steel 1.4301	8	thrust washer seal	PTFE
9	O-ring	FKM (Viton)	10	glandpacking	graphite (3-parts)
11	bushing	stainless steel 1.4301	12	gland	stainless steel 1.4401
13	belleville washer	stainless steel 1.4310	14	nut	stainless steel 1.4301
15	locking cap	stainless steel 1.4301	16	ring	stainless steel 1.4301
17	nut	stainless steel 1.4301	18	sleeve	plastic
19	hand lever	stainless steel 1.4301	20	locking device	stainless steel 1.4301
21	body gasket	stainless steel-graphite-PTFE (spiral wound)	22	socket head screw	stainless steel 1.4301
23	nut	stainless steel 1.4301	24	T-bar support	stainless steel 1.4308
25	T-bar	steel zinc plated	26	allen set screw	stainless steel 1.4301
27	socket head screw	stainless steel 1.4301	28	allen set screw	stainless steel 1.4301
29	nut	steel 1.0503	30	name plate	stainless steel 1.4301

ENG_465-GS_AQ_AQL_2021_Rev. 01

2-way flange ball valve, article 465-GS

Diameter DN 15 up to DN 50 pressure range PN 10 / PN 16 / PN 40

Diameter DN 65 up to DN 200 pressure range PN 40

Ball valve and electric actuator, each with standardized interface according to ISO 5211, enable direct, backlash-free assembly.

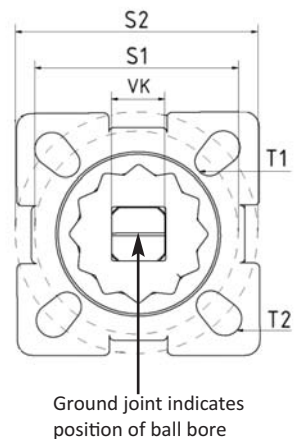
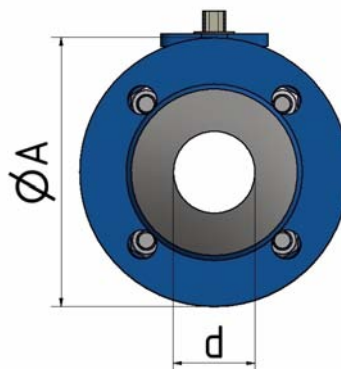
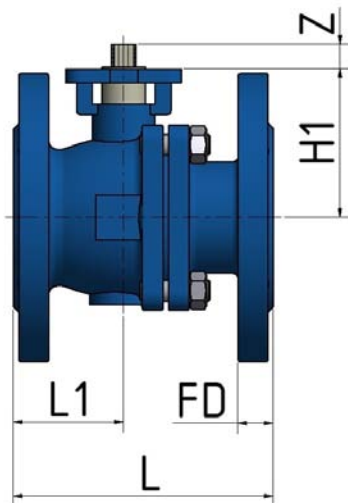
Modern design and compact construction characterize this series of electric part-turn actuators. The simple but robust and reliable design guarantees high availability in daily industrial use. The actuators are maintenance-free and completely pre-wired internally.

The self-locking gear with high-performance grease filling guarantees a long service life. The unit is delivered ready for connection, adjusted and tested.

Depending on the process requirements, there are two versions to choose from:

- a) OPEN / CLOSED operation class A according to EN 15714-2
- b) Jog mode or positioning operation, class B (S4 - 30%, motor power up to 120 starts per hour at peak load) according to EN 15714-2.

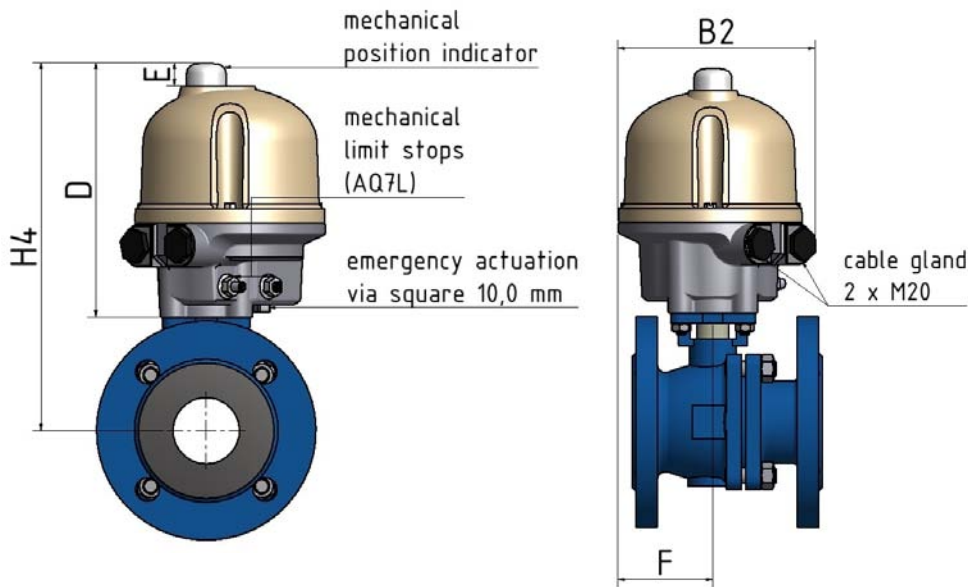
Further information on the electric drives can be found in the individual data sheets.



Diameter	L (mm)	L1 (mm)	FD (mm)	H1 (mm)	Z (mm)	ØA (mm)	d (mm)	S1/S2	VK (mm)	T1 (mm)	T2 (mm)	Pressure rating
DN 15 (1/2")	115	50	16	48	9	95	15	F03 / F04	9	4x6	4x6	PN 10/PN 16/PN 40
DN 20 (3/4")	120	54	18	53	9	105	20	F03 / F04	9	4x6	4x6	PN 10/PN 16/PN 40
DN 25 (1")	125	56	18	59	11	115	25	F04 / F05	11	4x6	4x7	PN 10/PN 16/PN 40
DN 32 (1 1/4")	130	58	18	71	11	140	32	F04 / F05	11	4x6	4x7	PN 10/PN 16/PN 40
DN 40 (1 1/2")	140	58	18	76	14	150	38	F05 / F07	14	4x7	4x9	PN 10/PN 16/PN 40
DN 50 (2")	150	63	20	85	14	165	50	F05 / F07	14	4x7	4x9	PN 10/PN 16/PN 40
DN 65 (2 1/2")	170	64	22	107	17	185	63	F07 / F10	17	4x9	4x11	PN 40
DN 80 (3")	180	70	24	117	17	200	76	F07 / F10	17	4x9	4x11	PN 40
DN 100 (4")	190	78	24	140	22	235	100	F10	22	-	4x11	PN 40
DN 125 (5")	325	160	26	183	27	270	125	F12	27	-	4x14	PN 40
DN 150 (6")	350	176	28	204	27	300	150	F12	27	-	4x14	PN 40
DN 200 (8")	400	221	34	253	36	375	200	F14	27	-	4x14	PN 40

2-way flange ball valve, article 465-GS with electrical actuator

Diameter DN 15 up to DN 50 pressure range PN 10 / PN 16 / PN 40
Diameter DN 65 pressure range PN 40



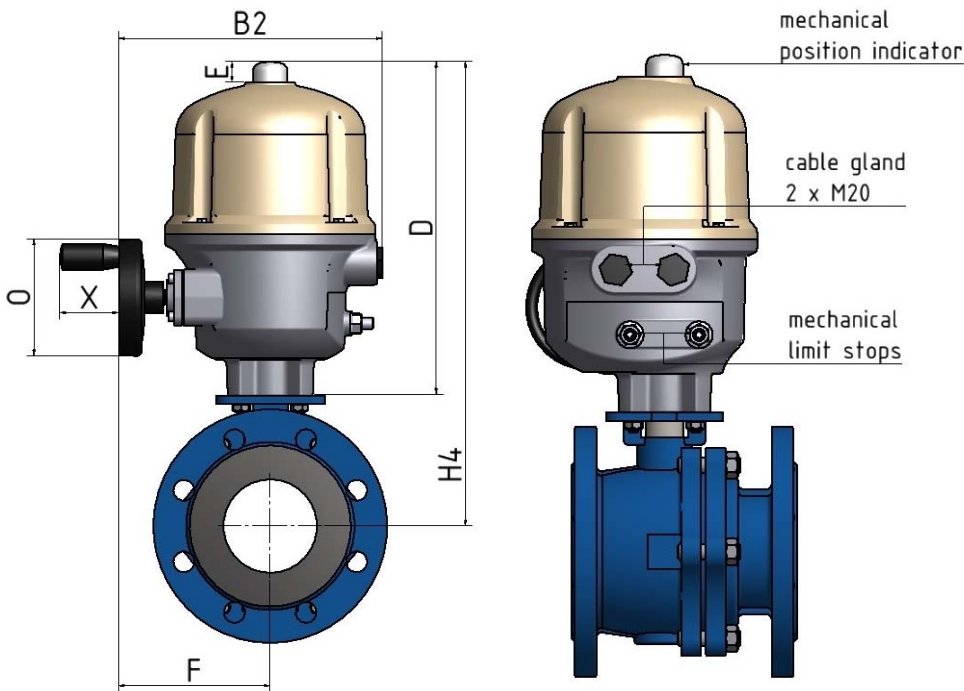
Ball valve 465-GS DN 15 - DN 65
Actuator size AQ1L - AQ7L

electrical actuator design max. 10 bar								
Diameter	Article-No.	Voltage	H4 (mm)	D (mm)	B2 (mm)	E (mm)	F (mm)	Weight (kg)
DN 15	215.3842.4.11		223	175	150	17,5	89,5	4,9
	AQ1L	171.8093.1L.13						
	171.8092.1L.13	24 V						
DN 20	215.3842.4.15		228	175	150	17,5	89,5	5,7
	AQ1L	171.8093.1L.13						
	171.8092.1L.13	24 V						
DN 25	215.3842.4.15		234	175	150	17,5	89,5	6,7
	AQ1L	171.8093.1L.13						
	171.8092.1L.13	24 V						
DN 32	215.3842.4.18		246	175	150	17,5	89,5	8,0
	AQ3L	171.8093.3L.15						
	171.8092.3L.15	24 V						
DN 40	215.3842.4.19		251	175	150	17,5	89,5	9,4
	AQ3L	171.8093.3L.15						
	171.8092.3L.13	24 V						
DN 50	215.3842.4.21		280	195	150	17,5	89,5	13,0
	AQ7L	171.8093.7L.15						
	171.8092.7L.15	24 V						
DN 65	215.3842.4.24		350	195	150	17,5	89,5	17,3
	AQ7L	171.8093.7L.15						
	171.8092.7L.15	24 V						

ENG_465-GS_AQ_AQL_2021_Rev.01

2-way flange ball valve, article 465-GS with electrical actuator

Diameter DN 80 up to DN 150 pressure range PN 40



Ball valve 465-GS DN 80 - DN 150
Actuator size AQ15 - AQ80

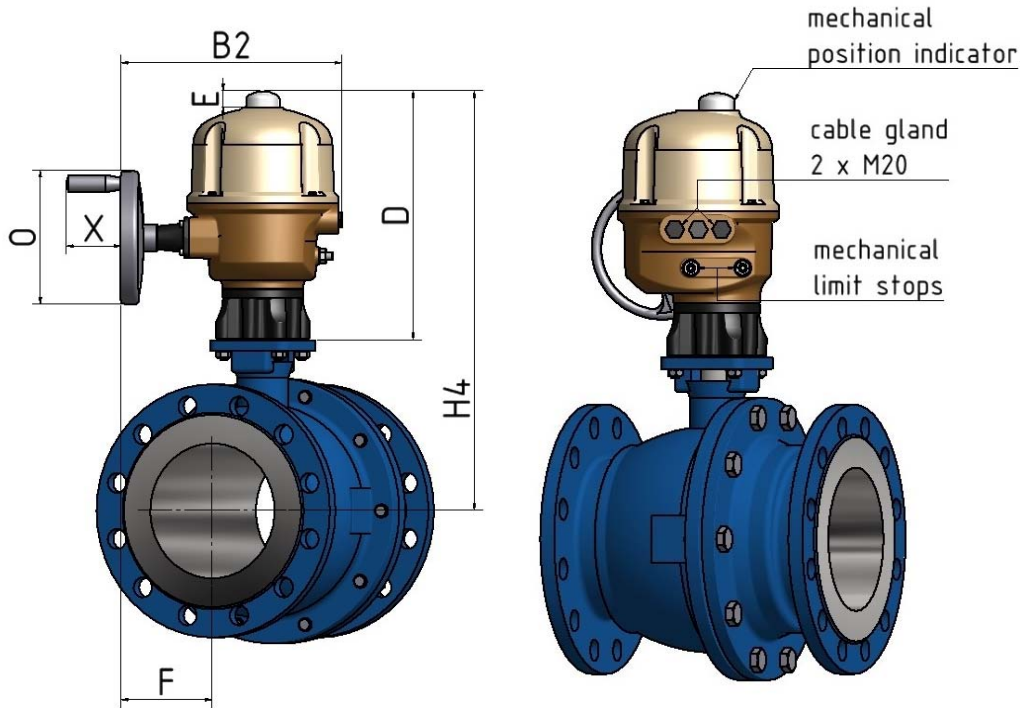


electrical actuator design max. 10 bar

Diameter	Article-No.	Voltage	H4 (mm)	D (mm)	B2 (mm)	E (mm)	F (mm)	X (mm)	O (mm)	Weight (kg)
DN 80	215.3842.4.25									
AQ15	171.8089.15.30	230 V	407	290	225	17,5	130,0	50,5	100,0	27,8
	171.8088.15.30	24 V								
	171.8090.15.30	400 V								
DN 100	215.3842.4.27									
AQ25	171.8089.25.30	230 V	460	320	315	24,0	200,0	63,5	120,0	43,5
	171.8088.25.25	24 V								
	171.8090.25.30	400 V								
DN 125	215.3842.4.28									
AQ50	171.8089.50.35	230 V	513	330	350	24,0	208,0	80,0	200,0	77,5
	171.8090.50.35	400 V								
DN 150	215.3842.4.29									
AQ50	171.8089.50.35	230 V	534	330	350	24,0	208,0	80,0	200,0	88,8
	171.8090.50.35	400 V								

2-way flange ball valve, article 465-GS with electrical actuator

Diameter DN 200 pressure range PN 40



Ball valve 465-GS DN 200
Actuator size AQ80

electrical actuator design max. 10 bar

Diameter	Article-No.	Voltage	H4 (mm)	D (mm)	B2 (mm)	E (mm)	F (mm)	X (mm)	O (mm)	Weight (kg)
DN 200	215.3842.4.31									
AQ80	171.8089.80.40	230 V	618	365	347	30,0	310,0	80,0	250,0	170,0
	171.8090.80.40	400 V								