

## Compact flange ball valve, article 437-GS with electrical actuator

**Diameter DN 15 up to DN 150**

**Compact flange-ball valve** in economical construction, for general, simple industrial use. Design as 1-part housing with screw-in part. Pressure class depends on nominal diameter up to PN 40. Full bore, floating ball, both sides 100% tight closing. Shaft seal consisting of multilayer PTFE V-rings, preloaded and self-adjusting by belleville washers and additional FKM O-ring.

Suitable for gaseous and liquid media (no steam) considering material resistance cast steel GP240GH.

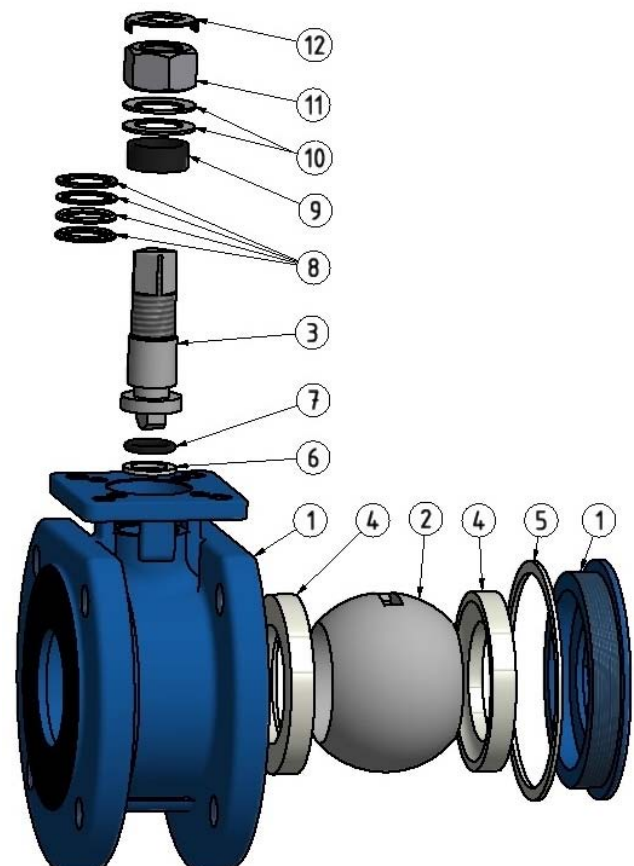
- **both sides flange connection according to DIN EN 1092-1, pressure range PN 16/PN 40, from diameter DN 65 PN 16**
- **flange with threaded hole according to DIN standard (metric)**
- **ball above with pressure compensation bore**
- **ISO 5211 mounting flange for actuators (direct mounting)**

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 2014/34/EU (Ex II 2 G/D Ex-c II)
	0035
	ambient -20° C ... +60° C
	medium -10° C ... +200° C

Pos.	description	material
1	body / screw-in part	cast steel 1.6019 (GP240GH) with epoxy coating
2	ball	stainless steel 1.4308
3	stem	stainless steel 1.4301
4	ball seal	PTFE-profile shells (TFM 1600)
5	body seal	PTFE
6	stem seal	PTFE
7	O-Ring	FKM (Viton)
8	chevron packing set	PTFE
9	thrust ring	stainless steel 1.4301
10	belleville washers	stainless steel 1.4310
11	stem nut	V2A
12	safety cap	V2A



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- Design Standard: DIN EN 12516-1
- Housing strength: DIN EN 12516-2
- Design pressure: PN 68 / PN 63 / PN 50 (depending on nominal diameter)
- Identification: EN 19, MSS SP-25
- Inspection / test: DIN EN 12266 P10 / P11 / P12
- Housing cast: AD 2000-data sheet W0 (TÜV)

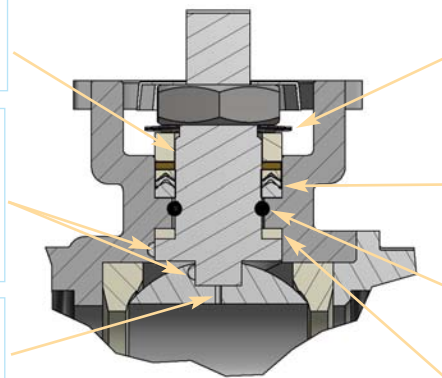


### shaft sealing according to VDI 2440 (TA-Luft)

**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 a 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

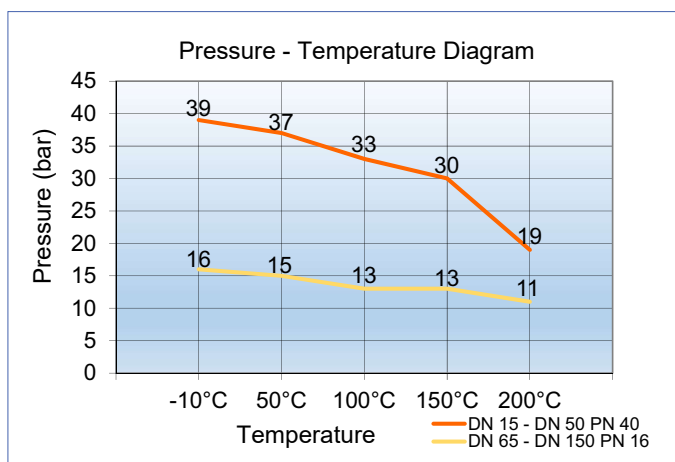


Disc springs ensure the permanent pretensioning of the chevron ring set.

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

**secondary** shaft seal (O-ring FPM)

**tertiary** shaft feedthrough (PTFE sealing washer)



### Operating-variants:

manual

pneumatic



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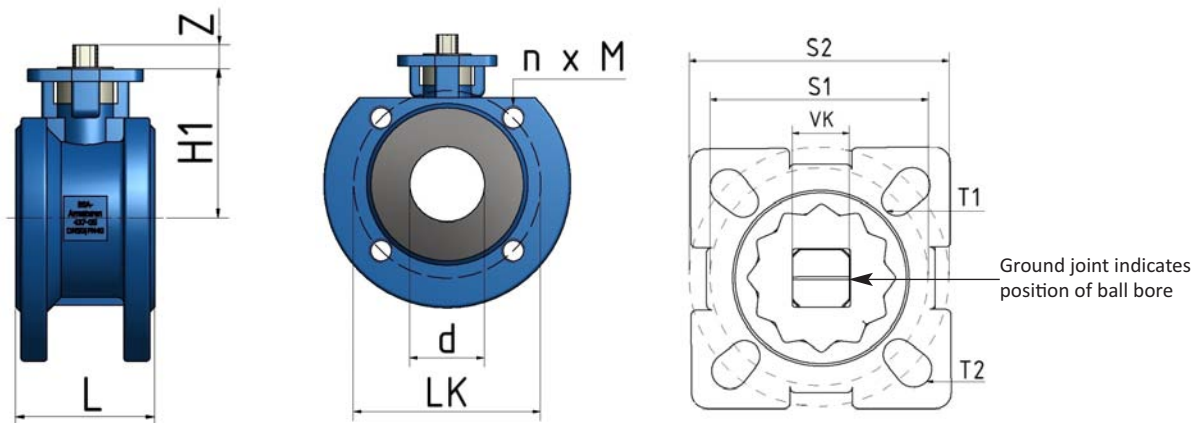
Ball valve and electric actuator, each with standardized interface according to ISO 5211, enable direct, backlash-free assembly.

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.

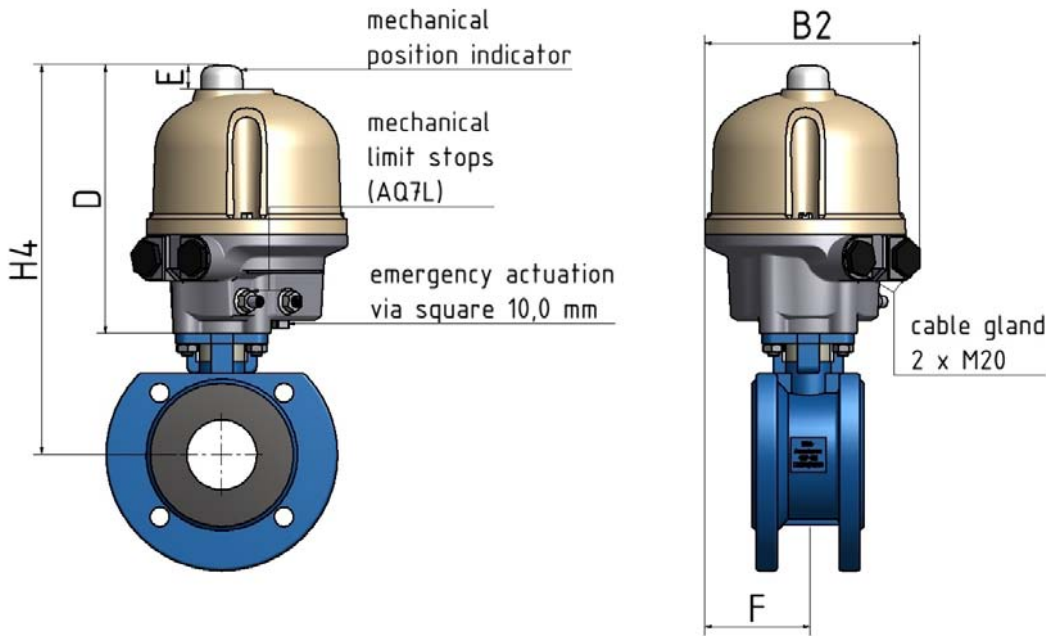


Diameter	L (mm)	H1 (mm)	LK (mm)	d (mm)	Z (mm)	n x M	S1/S2	VK (mm)	T1 (mm)	T2 (mm)	Pressure rating max (bar)
DN 15	42	49	65	15,0	9	4 x M12	F03/F04	9	4x6	4x6	40
DN 20	44	55	75	20,0	9	4 x M12	F03/F04	9	4x6	4x6	40
DN 25	50	62	85	25,0	11	4 x M12	F04/F05	11	4x6	4x7	40
DN 32	60	72	100	32,0	11	4 x M16	F04/F05	11	4x6	4x7	40
DN 40	65	78	110	38,0	14	4 x M16	F05/F07	14	4x7	4x9	40
DN 50	80	86	125	50,0	14	4 x M16	F05/F07	14	4x7	4x9	40
DN 65	110	108	145	63,5	17	4 x M16	F07/F10	17	4x9	4x11	16
DN 80	120	116	160	76,0	17	8 x M16	F07/F10	17	4x9	4x11	16
DN 100	150	139	180	95,0	22	8 x M16	F10	22	-	4x11	16
DN 125	180	176	210	118,0	27	8 x M16	F12	27	-	4x14	16
DN 150	225	192	240	142,0	27	8 x M20	F12	27	-	4x14	16

Diameter	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150
∅	15,0	20,0	25,0	32,0	38,0	50,0	63,5	76,0	95,0	118,0	142,0
KV	15,5	31,0	41,3	80,0	141,9	178,2	387,0	670,8	1.169,6	1.456,9	2.228,20

## Compact flange ball valve, article 437-GS with electrical actuator

Diameter DN 15 up to DN 65



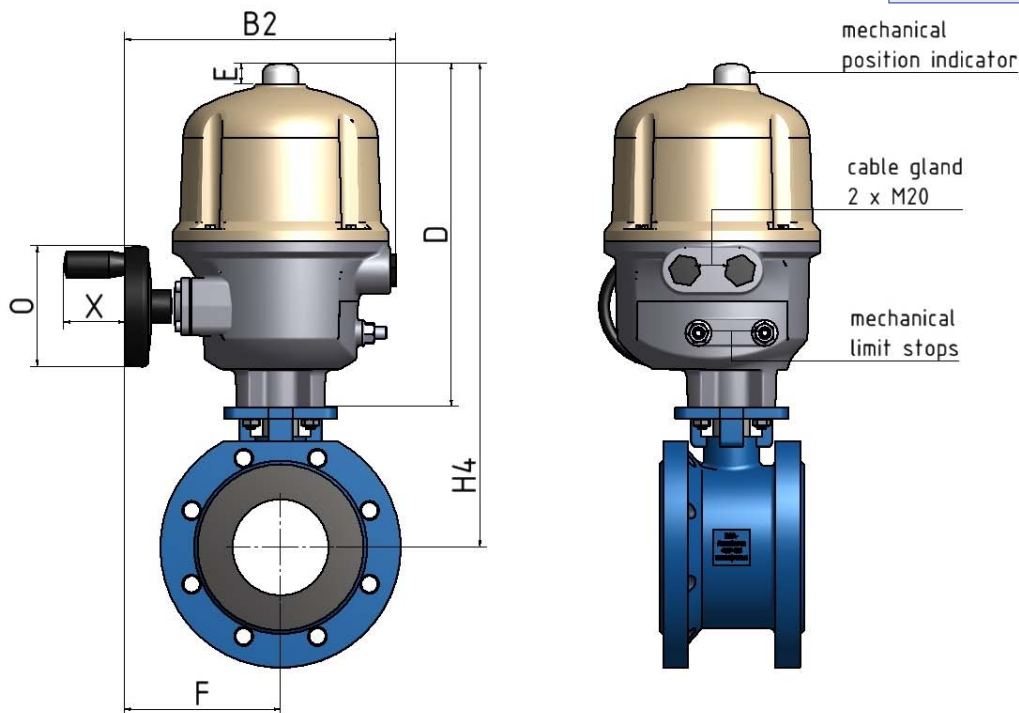
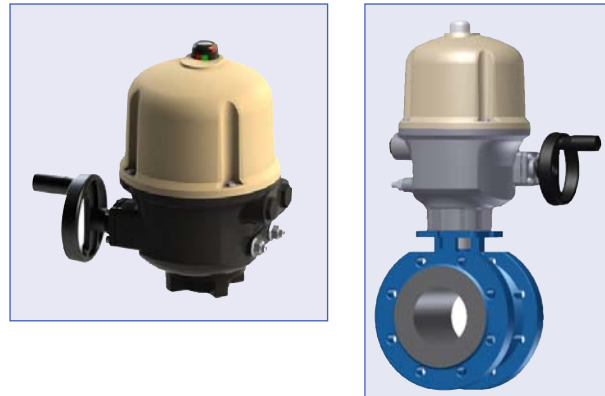
DN 15 - DN 65  
Actuator size AQ1L to AQ7L

Diameter	Article-No. <b>437-GS Cast steel 1.0619</b>	electrical actuator (design up to 16.0 bar operating pressure)						
		Voltage	H4 (mm)	D (mm)	E (mm)	B2 (mm)	F (mm)	Weight (kg)
DN 15	215.3868.4.11		224	175	17,5	150	89,5	2,9
AQ1L	171.8093.1L.13	230 V						
	171.8092.1L.13	24 V						
DN 20	215.3868.4.15		230	175	17,5	150	89,5	4,3
AQ1L	171.8093.1L.13	230 V						
	171.8092.1L.13	24 V						
DN 25	215.3868.4.15		237	175	17,5	150	89,5	4,9
AQ1L	171.8093.1L.13	230 V						
	171.8092.1L.13	24 V						
DN 32	215.3868.4.18		247	175	17,5	150	89,5	6,4
AQ3L	171.8093.3L.15	230 V						
	171.8092.3L.15	24 V						
DN 40	215.3868.4.19		253	175	17,5	150	89,5	7,4
AQ3L	171.8093.3L.15	230 V						
	171.8092.3L.15	24 V						
DN 50	215.3868.4.21		281	195	17,5	150	89,5	12,1
AQ7L	171.8093.7L.15	230 V						
	171.8092.7L.15	24 V						
DN 65	215.3868.4.24		303	195	17,5	150	89,5	13,6
AQ7L	171.8093.7L.15	230 V						
	171.8092.7L.15	24 V						

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**Compact flange ball valve, article 437-GS with electrical actuator**

**Diameter DN 80 up to DN 150**



Diameter	Article-No. <b>437-GS Cast steel 1.0619</b>	electrical actuator (design up to 16.0 bar operating pressure)								
		Voltage	H4 (mm)	D (mm)	F (mm)	B2 (mm)	E (mm)	O (mm)	X (mm)	Weight (kg)
DN 80	215.3868.4.25	230 V 24 V 400 V	406	290	107,5	185	24,0	100	50,5	24,5
AQ 10	171.8089.10.25									
	171.8088.10.21 171.8090.10.25									
DN 100	215.3868.4.27	230 V 24 V 400 V	459	320	177,5	225	24,0	120	63,5	35,7
AQ 25	171.8089.25.30									
	171.8088.25.25 171.8090.25.30									
DN 125	215.3868.4.28	230 V 400 V	517	401	230,0	360	24,0	160	80,0	70,0
AQ 30	171.8089.30.35									
	171.8090.30.35									
DN 150	215.3868.4.29	230 V 400 V	540	401	230,0	360	24,0	160	80,0	90,0
AQ 50	171.8089.50.35									
	171.8090.50.35									

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