

ARGUS Flanged ball valve FK75M

Technical data sheet

DN65 (2 1/2") – DN150 (6")
PN10 – PN40, ANSI150 – ANSI300

Material: low temperature carbon steel / stainless steel
Sealing system: soft seated / full metal seated

Two piece body, fixed ball by bearing pads in the body
full bore, ends ANSI B16.5 or EN 1092-1

Design to API 6D / ANSI B 16.34 resp. PED 97/23/EC; BS 5351 available on request.

fire safe acc to BS 6755 Part 2, ISO 10497 resp. API 607 6th edition,

Anti-static Design acc. to. DIN EN ISO 17292 chapter 5.2.7,
Anti blow out Stem, long life double stem seal system.

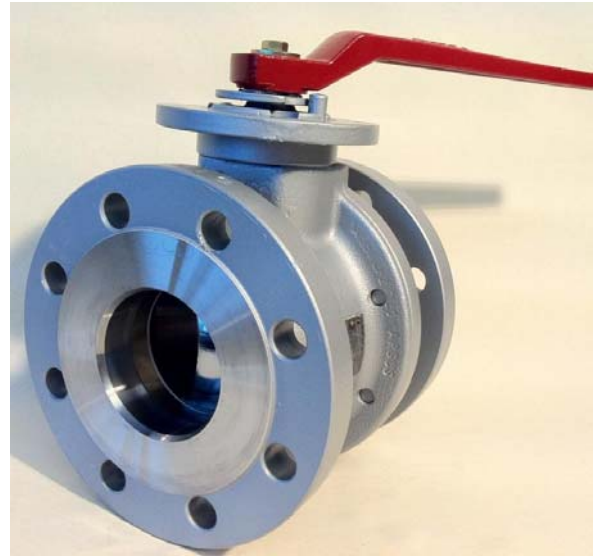
Stem supported in bearings to ensure seals are free from operating loads.

Stem seal system complies with TA-Luft acc. VDI 2440, EPA fugitive emissions or
EN ISO 15848-1:2006 requirements.

Face to face dimensions in accordance with ANSI B16.10, EN 558-1 resp. EN 12982.

Ball valves – Full bore design:

Standardized material selection as follows:



Item	Description	PED description	Material Specification	Nearest Typical ASTM Equivalent
1 A	Body	P355NL1+N	LCS TSTE 355N DIN 1.0566	A350LF2
		X6CrNiMoTi17-12-2	SS DIN 1.4571	A182 Gr. F 316
1 B	Flanges	P355NL1+N	A350LF2 (ANSI)	A350LF2
		P250GH+N	C22.8 (DIN)	A105
		P355NL1+N	LCS TSTE 355N DIN 1.0566 (DIN)	A351 Gr. CF8M
		X6CrNiMoTi17-12-2	SS DIN 1.4571	A182 Gr. F 316
2	Ball	GX20Cr14+QT	CR 13 DIN 1.4027	A217 Gr. CA15
		GX5CrNiMo19-11-2	SS DIN 1.4408	A351 CF8M
		GX20Cr14+QT ENP	CR 13 DIN 1.4027 ENP	A105 ENP
		GX5CrNiMo19-11-2 ENP	SS DIN 1.4408 ENP	A351 CF8M
		X2CrNiMoN22-5-3 ARGULOY	Duplex DIN 1.4462 ARGULOY	A182 F51 ARGULOY
3	Stem	X2CrNiMoN22-5-3	Duplex DIN 1.4462	A182 F51
		X14CrMoS17+QT	CR13 DIN 1.4104	Type 430
4	Ball seats		PTFE/ss, POM/ss; LYTON springloaded, cavity relief	
		GX20Cr14+QT Nikadur	CR 13 DIN 1.4027 Nikadur	
		X2CrNiMoN22-5-3 Nikadur	Duplex DIN 1.4462 Nikadur	
		X2CrNiMoN22-5-3 ARGULOY	Duplex DIN 1.4462 ARGULOY	
5	Stem seals		PTFE; FPM; MFQ, Graphite	
6	Body seals		PTFE ; FPM, MFQ, Graphite	
7	Bolts		A193 B7; A194 8M; A4-70	
8	Nuts		A194 Gr.4, A194 8M, A4-70	

Stem sealing version acc. to TA-Luft VDI 2440

- O-Ring PTFE/Graphite

Soft seat version: PTFE,POM

- PTFE- Spring loaded, cavity relief
- POM – Spring loaded, cavity relief

Metal seated version

- **Standard: bi-directional sealing:**
 - 1) **O-Ring:** DN65-200
 - 2) **Celastic:** DN 80-200

High temperature version with stuffing box / DN ISO and without

Metal coating Standard ENP / NIKADUR

- **ENP:** Coating method: Ni , ball electroless nickel plated and hardened; Coating thickness / hardness: 50 - 80m / > 70 HRC, Max. allowable temperature: + 350°C / + 660 F
- **NIKADUR:** Coating method: Ni + SiC, ball resp. seats electroless nickel plated and hardened; Coating thickness / hardness: 50 - 80m / > 75 HRC; Max. allow. temperature: + 350°C /+ 660 F

Metal coating Standard ARGULOY

- **ARGULOY:** Coating method: Ni-Basis + Cr + others, ball resp. seats coating by plasma spraying and bonding; Coating thickness / hardness: > 500/ 62 HRC Max. allowable temperature: + 550°C / + 1000 F

Dimensions : FK 75M DIN Standard design

Dimensions [mm] acc.to. EN 558-1										
PN (bar)	DN	d0	l1	l2	l1	l2	h2	h15	r1	SW
10	65	65	170	85	290	145	140	161	327	19
-	80	78	180	90	310	155	150	171	327	19
16	100	100	190	95	350	175	166	187	327	19
	125	125	325	162,5	-	-	226,5	288	935	36
25	65	65	170	85	290	145	140	161	327	19
-	80	78	180	90	310	155	150	171	327	19
40	100	100	190	95	350	175	166	187	327	19

Dimensions: FK 75M ANSI B16.34 Standard design ANSI class 150 / 300

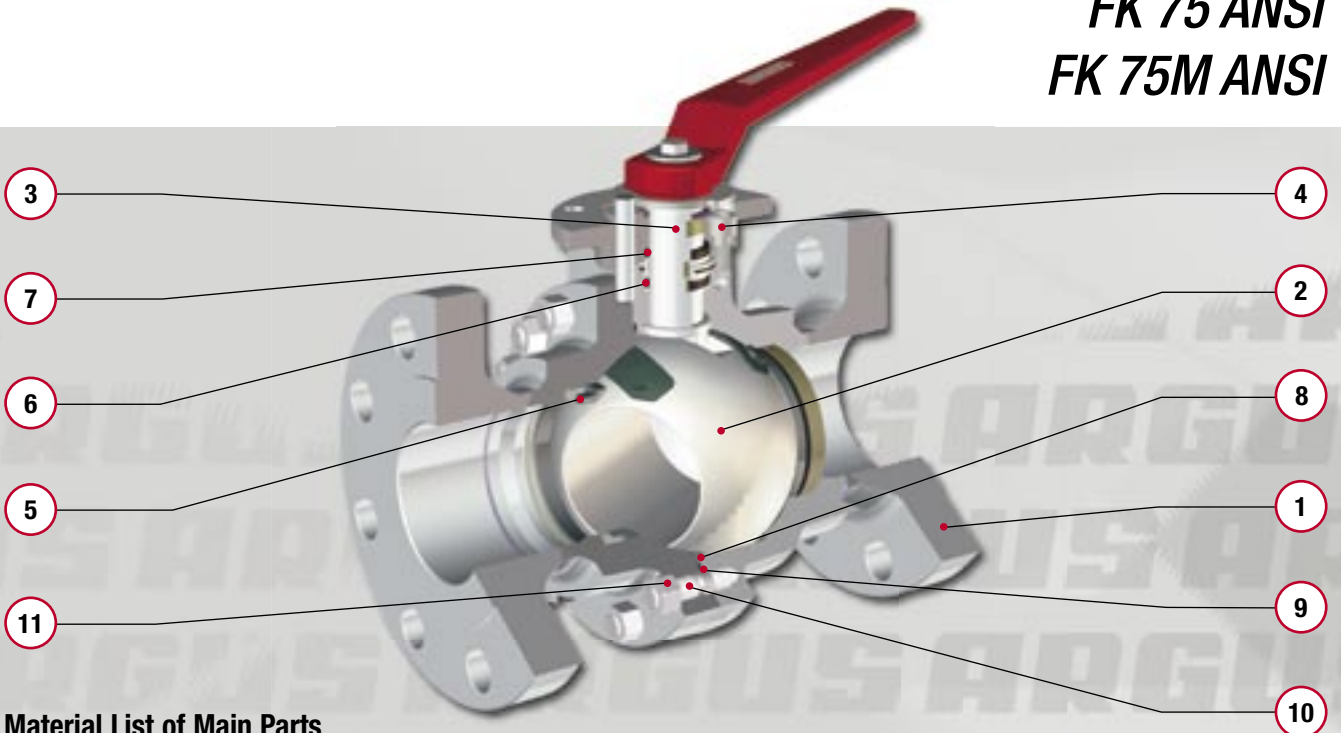
Dimensions [mm]									
Inch	Class	Flange	l1	l2	h2	h15	r1	SW	
3	150	RF	203	102	150	171	327	19	
4	150	RF	229	114	166	187	327	19	
6	150	RF	394	197	244	306	935	36	
8	150	RF	457	229	279	341	935	36	
6x4x6	150	RF	267	133,5	166	187	327	19	
8x6x8	150	RF	292	146,0	244	306	935	36	
3	300	RF	283	141,5	150	171	327	19	
4	300	RF	305	152,5	166	187	327	19	
6x4x6	300	RF	403	201,5	166	187	327	19	

Accessories:

- Locking device
- DIN ISO Stem Extension
- Spindle extension

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FK 75 ANSI
FK 75M ANSI



Material List of Main Parts

Item	Description	Material Specification *	Nearest Typical ASTM-Equivalent
1	Body / Flange	CS Low Temp. 1.0566 CS Low Temp. A350 LF2 SS 1.4571 SS 1.4581	A350 LF2 A182 F316Ti
2	Ball	CR13 1.4027 SS 1.4408 SS Duplex hardfaced	A217 Gr. CA15 A351 CF8M A182 F51
3	Stem	CR13 1.4104 Duplex SS	Type 430 A182 F51
4	Gland Bolts	8.8 A4-70	
5	Ball Seats	PTFE SS hardfaced	
6	Primary Stem Seal	PTFE; FPM; MFQ	
7	Secondary Stem Seal	Celastic	
8	Primary Body Seal	PTFE; FPM; MFQ	
9	Secondary Body Seal	Celastic	
10	Bolts	A193 B7 (ASTM) A193 B8MN (ASTM)	
11	Nuts	A194 Gr.4 (ASTM) A194 8M (ASTM)	



**ARGUS
FK 75/FK 75M**

**DN 65-200 ANSI Cl. 150 Full Bore
DN 150-250 ANSI Cl. 150 Reduced Bore
DN 65-100 ANSI Cl. 300 Full Bore
DN 150 ANSI Cl. 300 Reduced Bore**

Description:

The FK 75M ball valve with its many innovative design features represents the highest standards in valve technology and is designed to meet the API-6D, ANSI 16.34 and BS 5351 requirements. Long lifetime and low operating torques due to the clear separation between the sealing and bearing functions.

Design:

Split body design with superfine finished padmounted ball, anti-blow-out stem, spring loaded ball seats with cavity relief and anti-static device. Long life double stem seal system and stem supported in bearings to ensure seals are free from operating loads. Stem sealing construction complies with the latest TA-Luft and EPA (method 21) fugitive emissions requirements.

Fire safe to BS 6755 and API 607.

DIN/ISO 5211 mounting plate for easy assembly with actuators included.

Accessories and Options:

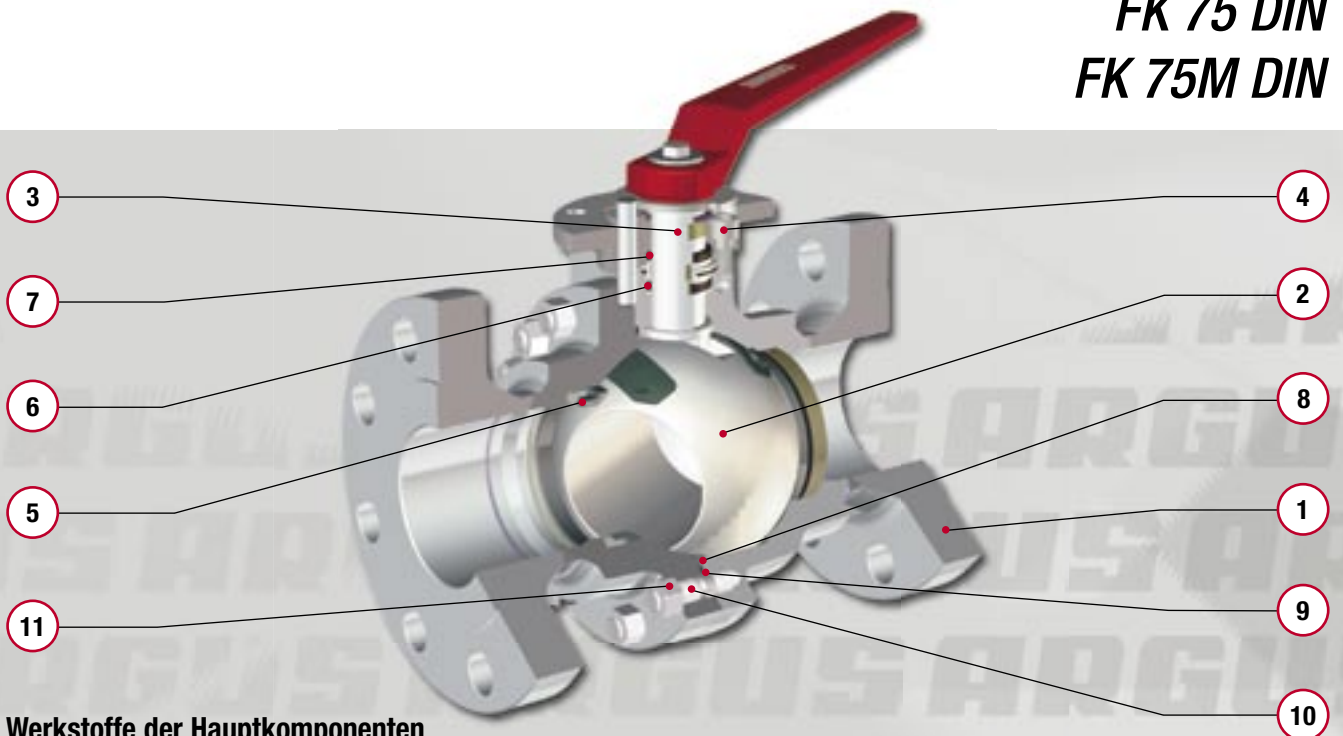
- Limit switches
- Locking devices
- Extended wrenches
- Stem extensions
- Steam jackets for indirect process heating
- Metal to metal seats
- Drain and vent/bleed connections

Standard Material Combinations (preferably to order – short delivery time):

ANSI	Cl. 150-300 Mat.-Code 1805408552	Cl. 150-300 Mat.-Code 140540D552	Cl. 150-300 Mat.-Code 440540D552	Cl. 150-300 Mat.-Code 1E8N8F8552
Body	CS Low Temp.	CS Low Temp.	SS	CS Low Temp.
Ball/Stem	CR13	SS/Duplex SS	SS/Duplex SS	CR13 hardfaced/CR13
Ball Seats	PTFE	PTFE	PTFE	CR13 hardfaced
Stem Seals	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic
Body Seals	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic
Seat Springs	SS	SS	SS	SS

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FK 75 DIN
FK 75M DIN



Werkstoffe der Hauptkomponenten

Nr.	Bezeichnung	Werkstoffbezeichnung	Vergleichbarer ASTM - Werkstoff
1	Gehäuse / Flansch	P355NL1 (TS1E 355N) P250GH (C22.8N) 1.4571 (CrNi-Stahl)	A350 LF2 A105 A182 F316Ti
2	Kugel	1.4027 (Cr-Stahl) 1.4408 (CrNi-Stahl) 1.4462 (Duplex) hartbeschichtet	A217 Gr. CA15 A351 CF8M A182 F51
3	Schaltwelle	1.4104 (Cr-Stahl) 1.4462 (Duplex)	Type 430 A182 F51
4	Schrauben	8.8 A4-70	
5	Kugeldichtung	PTFE CrNi-Stahl hartbeschichtet	
6	Primäre Schaltwellenabdichtung	PTFE; FPM; FVMQ	
7	Sekundäre Schaltwellenabdichtung	Celastic	
8	Primäre Gehäuseabdichtung	PTFE; FPM; FVMQ	
9	Sekundäre Gehäuseabdichtung	Celastic	
10	Schrauben	A193 B7 (ASTM) A193 B8MN (ASTM)	
11	Muttern	A194 Gr.4 (ASTM) A194 8M (ASTM)	

**ARGUS
FK 75/FK 75M**

**DN 65-100 DIN PN 16-40
DN 150 DIN PN 16**

Beschreibung:

Der Kugelhahn FK 75M steht aufgrund seiner besonderen, innovativen Konstruktion für den höchsten Standard in der Kugelhahntechnologie. Er entspricht den geltenden technischen Regeln für Druckbehälter (TRB) und den in Bezug stehenden AD-Merkblättern sowie DIN-Normen.

Die Trennung der Dichtungs- und Lagerungsfunktion sowohl bei der Kugel als auch bei der Schaltwelle ergibt ausgezeichnete Betriebszeiten und geringe Drehmomente.

Konstruktionsmerkmale:

Zweiteiliges Gehäuse (split body), gelagerte Kugel, Anti-blow-out-Schaltwelle, federunterstützte Kugeldichtung, druckentlastend und Anti-static.

Die spezielle Lagerung der Schaltwelle verhindert das Auftreten schädlicher Kräfte im Bereich der Schaltwellenabdichtung. Das ARGUS Doppeldichtsystem an der Schaltwelle ist so ausgeführt, daß es die neuesten Anforderungen nach TA Luft und EPA (method 21, USA) erfüllt.

Fire safe nach BS 6755 und API 607.

Anschlußplatte gemäß DIN/ISO 5211, ermöglicht eine genormte Antriebsadaption.

Zubehör und Optionen:

- Endlagenrückmeldung
- Abschließvorrichtung
- Schaltwellenverlängerung
- Heizmantel
- Metallische Kugeldichtung
- Anschlüsse für Entleerung/Belüftung und zum Spülen

Standardwerkstoffe:

DIN	PN 16-40 Mat.-Code 1805408552	PN 16-40 Mat.-Code 140540D552	PN 16-40 Mat.-Code 440540D552	PN 16-40 Mat.-Code 1E8N8F48552
Gehäuse	C-Stahl	C-Stahl	CrNi-Stahl	C-Stahl
Kugel/Schaltwelle	Cr-Stahl	CrNi-Stahl/Duplex	CrNi-Stahl/Duplex	Cr-Stahl hartbeschichtet /Cr-Stahl
Kugeldichtung	PTFE	PTFE	PTFE	Cr-Stahl hartbeschichtet
Schaltwellenabdichtung	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic
Gehäuseabdichtung	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic	PTFE/Celastic
Tellerfedern	CrNi-Stahl	CrNi-Stahl	CrNi-Stahl	CrNi-Stahl