REF. 775

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

2 pieces stainless steel ball valve between flanges (wafer) with full bore for Chemical industries, petrochemical industries, hydraulic installation, heating, water distribution, compressed air.
Ball valve with firesafe certificate ISO 10497 to reduce risks in case of fire.
Fugitive emission according to EN 15848-1 :2003 A Class for an excellent tightness on the stem and to prevent external leakage.
3 PTFE filled with 15% graphite chevrons rings on stem, PTFE seat.
Compatible with explosive atmosphere, ATEX Zone 1&21 and Zone 2&22 thanks to the double antistatic device.
Handling possible with locking device, gearbox, oval handwheel or stem extension.
Thanks to the ISO 5211 plate, an actuator can be installed on the valve.

FIRE SAFE ISO 10497

Certificate 3.1

PED/2014/68/UE

NACE MR01-75



Size : DN15 to DN150 (NPS 1/2" to 6")
Connection : Between flanges Class 300 PN50 RF
Min Temperature : -28°C
Max Temperature : +200°C
Max Pressure : 50 Bars
Specifications : Double antistatic device, ATEX
ISO 5211 mounting pad
Anti blow-out stem, full bore
Fugitive emissions ISO 15848-1
Fire safe ISO 10497

Materials : Forged stainless steel ASTM A479 316L (up to DN100)

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

SPECIFICATIONS :

- Full bore
- Anti blow-out stem
- With ISO 5211 mounting pad
- Wafer type
- Between flanges R.F. Class 300 (PN50)
- Double antistatic device
- Fire safe according to ISO 10497 (ISO-FT marking)
- Contents ball with removable body
- With exhaust hole in the ball from DN50 to DN150 (located in the top of the ball to avoid overpressure in it)
- Machining of the seat for pressure relief DN65 to DN150 (respect the flow direction indicated by the arrow)
- Threaded flanges holes
- Fugitive emissions according to ISO 15848-1 : 2003 Class A
- 3 PTFE filled with graphite chevrons rings on stem
- Packing with elastic rings
- Forged stainless steel body

USE :

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Min and max Temperature Ts : - 28°C to + 200°C
- Max Pressure Ps : 50 bars
- Vacuum : 10^{-5} torr (without upstream pressure)
- Compressed air (ambient temperature) : 10 bars up to DN50, 8 bars from DN65 to 100
- Steam : 8 bars up to DN50, 6 bars from DN65 to 100

RANGE :

- Forged stainless steel body Class 300 (PN50) **Ref. 775** from DN 15 to DN 150 (NPS 1/2“ to 6“)
  Gearbox recommended for DN150

- Possible with gear box IP67 **Ref. 9830260 to 262** from DN 15 to DN 150 (NPS 1/2“ to 6“)

BOLT TIGHTENING TABLE (FOR FLANGES) (in Nm) :

NPS (")	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"
DN (mm)	15	20	25	32	40	50	65	80	100	125	150
THREADED	M14	M16	M16	M16	M20	M16	M20	M20	M20	M20	M20
Torque (Nm) with carbon steel bolting	135	205	205	205	400	205	400	400	400	400	400
Torque (Nm) with stainless steel bolting	84.3	128	128	128	250	128	250	250	250	250	250

TORQUE VALUES (in Nm without safety coefficient) :

NPS (")	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"
DN (mm)	15	20	25	32	40	50	65	80	100	125	150
Torque (Nm) PN50	6.8	13	15	19	35	48	74	90	160	270	570

We recommend a safety coefficient of 2 to choose the actuator

Information provided as an indication and subject to possible modification

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

ACCESSORIES AND OPTIONS :

- Locking device **Ref. 9830140 to 9830147** from DN 15 to DN 150 (NPS 1/2“ to 6“)
- Stainless teel handle **Ref. 9830170 to 9830177** from DN 15 to DN 150 (NPS 1/2“ to 6“)
- Steel oval handle **Ref. 9830271 to 9830272** from DN 15 to DN 32 (NPS 1/2“ to 1“1/4)
- Stainless steel oval handle
- Stainless steel bolting
- Carbon steel stem extension 100 mm **Ref. 9830273 to 9830279** from DN 15 to DN 150 (NPS 1/2“ to 6“)
- Stainless steel stem extension 100 mm **Ref. 9830193 to 9830199** from DN 15 to DN 150 (NPS 1/2“ to 6“)
- Deadman **Ref. 9830160 to 9830165** from DN 15 to DN 50 (NPS 1/2“ to 2“)
- Dry cleaned oxygen **Ref. 9830150 to 9830154** from DN 15 to DN 150 (NPS 1/2“ to 6“)
- Standard dry cleaned
- Seat PTFE filled with glass, graphite, stainless steel or metal
- Pocket less seat PTFE or PTFE filled with glass
- Heating jacket carbon or stainless steel
- Specials coated
- Hole in the ball for overpressure device
- Double o ring on stem

ENDS :

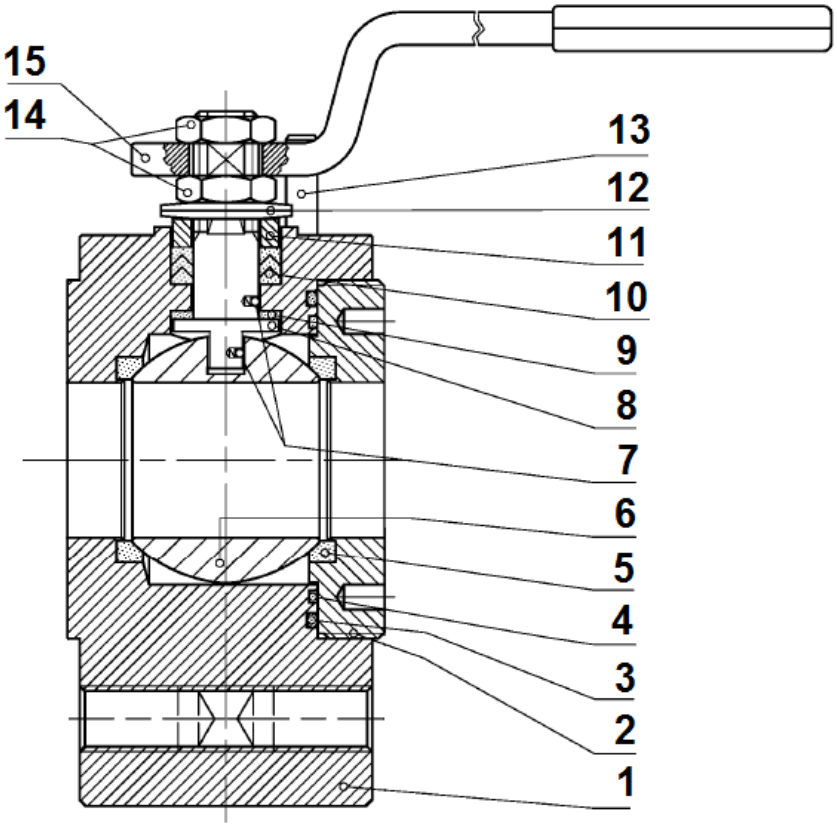
- Between flanges Class 300 (PN50) R.F.

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

MATERIALS REF.775 DN 15-20 (ADLER FA1 TYPE) :

PACKING GASKETS :





Repairability :



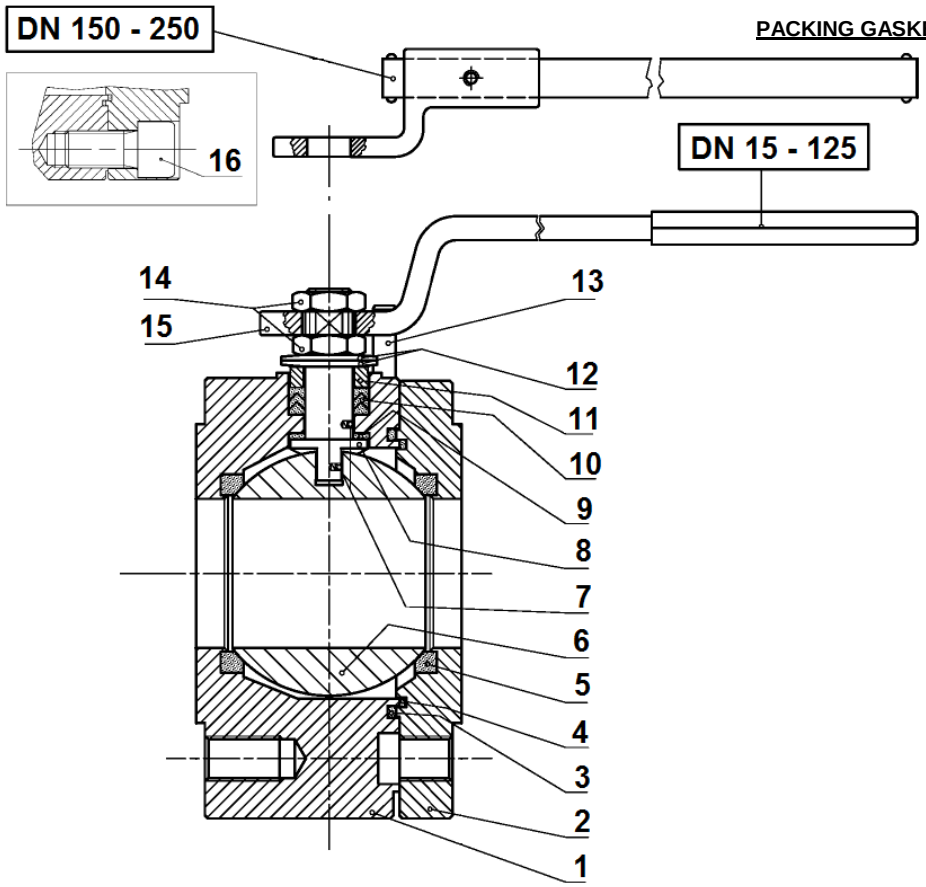
*Gaskets kit (items 3, 4, 5, 9 and 10)	
DN15	9830204
DN20	9830205

(* : Included in gaskets kit)

Item	Designation	Materials DN15-20
1	Body	ASTM A479 316L
2	Ends	
3*	O ring	FKM
4*	Body gasket	PTFE
5*	Seat	PTFE
6	Ball	ASTM A479 316L
7	Double antistatic device	ASTM A479 316
8	Stem	ASTM A479 316L
9*	Stem gasket	PTFE
10*	Chevron packing	PTFE filled with 15% graphite
11	Gland follower	ASTM A479 304
12	Elastic ring	C72 / 50 Cr V4 galvanized
13	Pin	UNI 3740 8.8 galvanized
14	Nut	UNI 3740-6S galvanized
15	Handle	AISI 1010 galvanized

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

MATERIALS 775 DN 25-150 (ADLER FA2 TYPE) :



PACKING GASKETS :



Repairability :



*Gaskets kit (items 3, 4, 5, 9 and 10)	
DN25	9830206
DN32	9830207
DN40	9830208
DN50	9830209
DN65	9830210
DN80	9830211
DN100	9830212
DN125	9830213
DN150	9830214

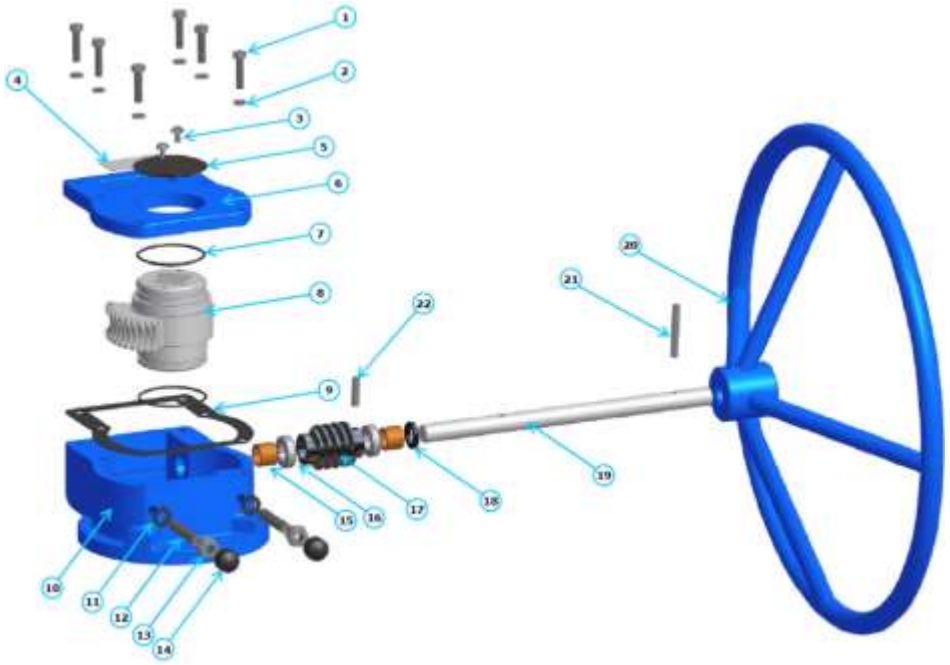
(* : Included in gaskets kit)

Item	Designation	Materials DN50-150
1	Body	ASTM A479 316L
2	Ends	
3*	O ring	FKM
4*	Body gasket	PTFE
5*	Seat	PTFE
6	Ball	ASTM A479 316L
7	Double antistatic device	ASTM A479 316
8	Stem	ASTM A479 316L
9*	Stem gasket	PTFE
10*	Chevron packing	PTFE filled with 15% graphite
11	Gland follower	ASTM A479 304
12	Elastic ring	C72 / 50 Cr V4 galvanized
13	Pin	UNI 3740 8.8 galvanized
14	Nut	UNI 3740-6S galvanized
15	Handle	AISI 1010 galvanized
16	Screw	UNI 3740 8.8 galvanized

Information provided as an indication and subject to possible modification

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

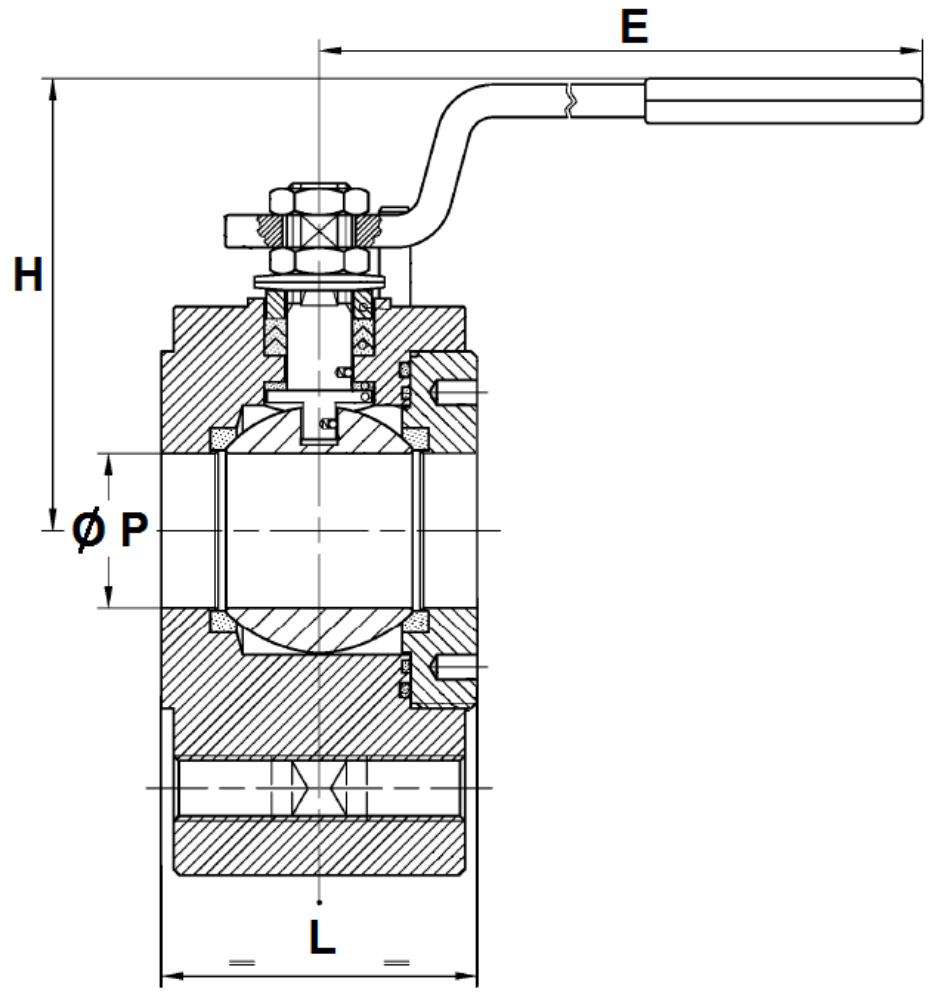
GEARBOX MATERIALS :



Item	Designation	Materials Ref. 9830260 to 9830262
1	Box screw	DIN 933 class 8.8
2	Washer	C72
3	Indicator screw	DIN 86 class A2
4	ID plate	Steel S235 JR
5	Indicator	Steel S235 JR
6	Cover	Ductile iron EN GJS-400-15
7	O ring	NBR 70 Shore A
8	Wheel	Ductile iron EN GJS-500-7
9	Cover gasket	SL509AT
10	Box	Ductile iron EN GJS-400-15
11	Gasket	NBR 70 Shore A
12	Adjusting bolt	DIN 915 class 12.9
13	Nut	DIN 934 class 8G
14	Bolt cap	NBR 70 Shore A
15	Bushing	G Cu Sn10
16	Axial ball bearing	-
17	Worm	C45 + NiP
18	Gasket	NBR 70 Shore A
19	Input shaft	C45 + NiP
20	Handwheel	Steel S235 JR
21	Dowell pin	DIN 7 Class A2
22	Dowell pin	DIN 7 Class A2

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

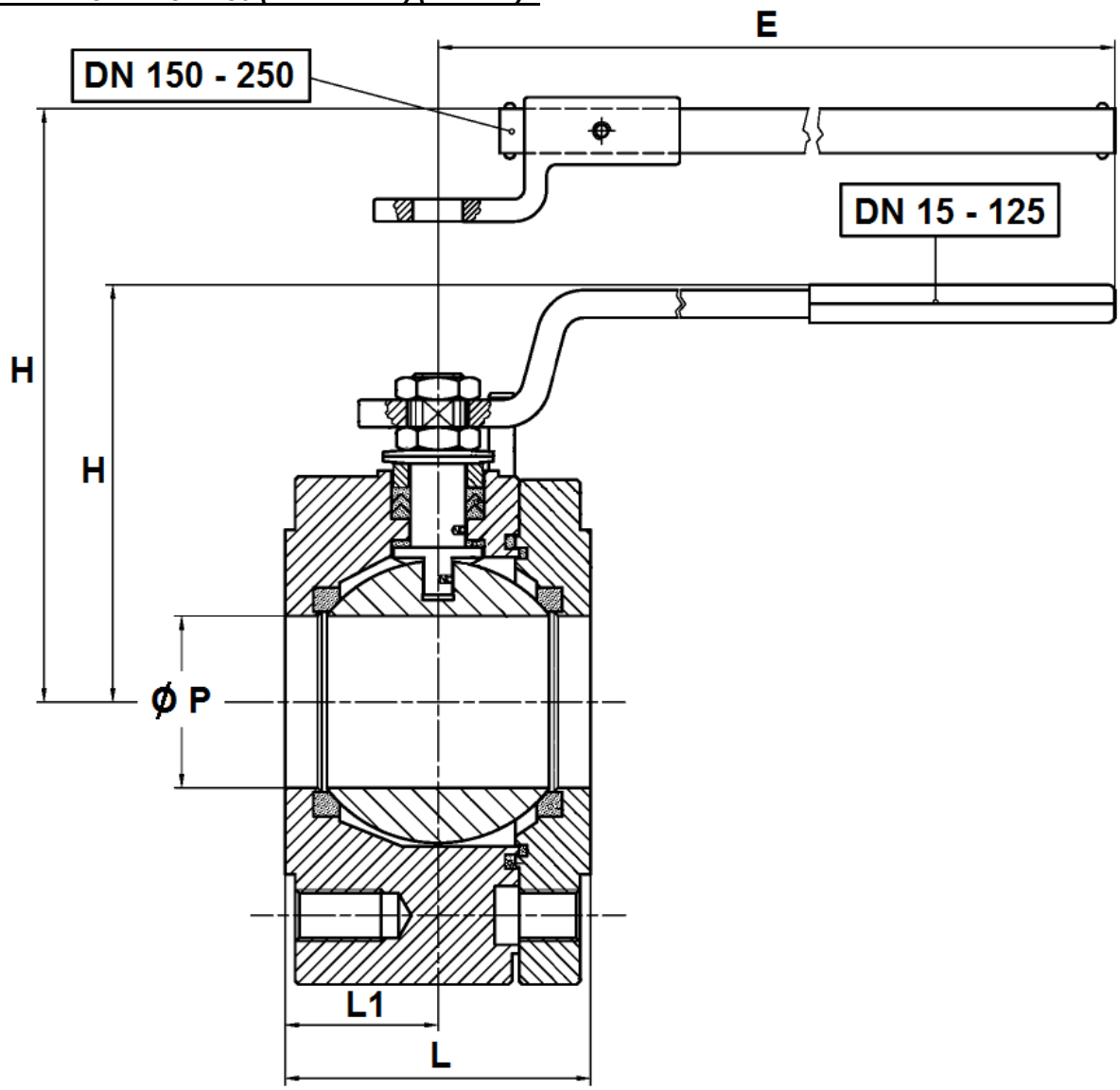
SIZE REF.775 DN 15–20 (FA1 TYPE) (in mm) :



Ref.	NPS (")	1/2"	3/4"
	DN (mm)	15	20
775 FA1	Ø P	15	19
	L	35	35
	E	145	145
	H	66	68
	Weight (in Kg)	1.6	1.9
	Ref.	775015	775020

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

SIZE REF. 775 DN 25 – 150 (FA2 TYPE) (in mm) :

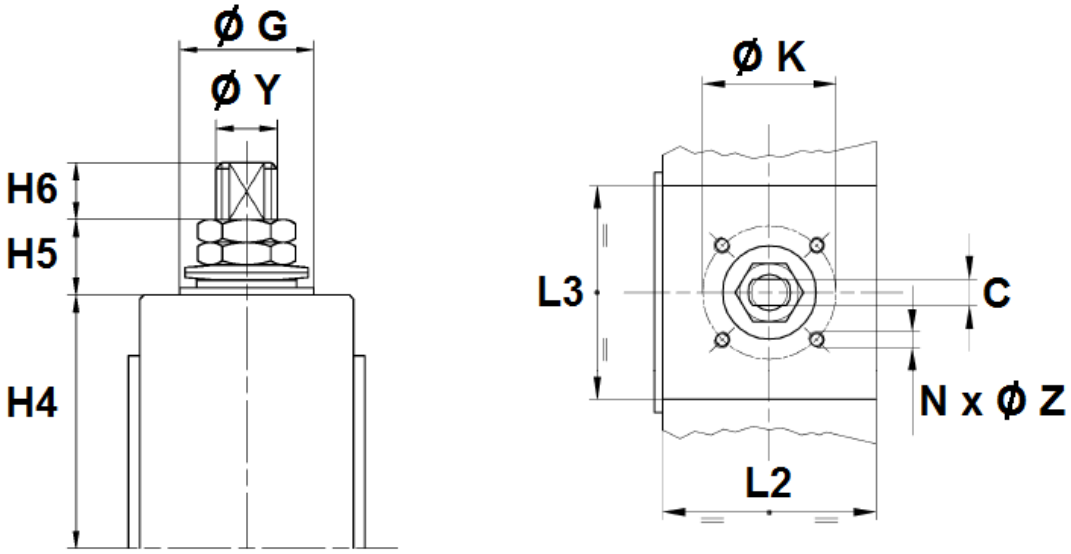


Ref.	NPS (")	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	6"
	DN (mm)	25	32	40	50	65	80	100	150
775 FA2	Ø P	25	30	38	51	64	76	101	152
	L	57	65	79	85	103	120	155	234
	L1	21.5	25.5	32	42.5	51.5	60	77.5	117
	E	185	185	280	280	370	370	470	750
	H	85	91	110	120	144	152	174	256
	Weight (Kg)	3.9	6.1	9.1	11.5	18	23.5	35	90
	Ref.	775025	775032	775040	775050	775065	775080	775100	775150

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

STEM AND ISO MOUNTING PAD SIZE REF. 775 DN 15–20 FA1 TYPE (in mm) :

775 DN 15 – 20 (FA1 TYPE)



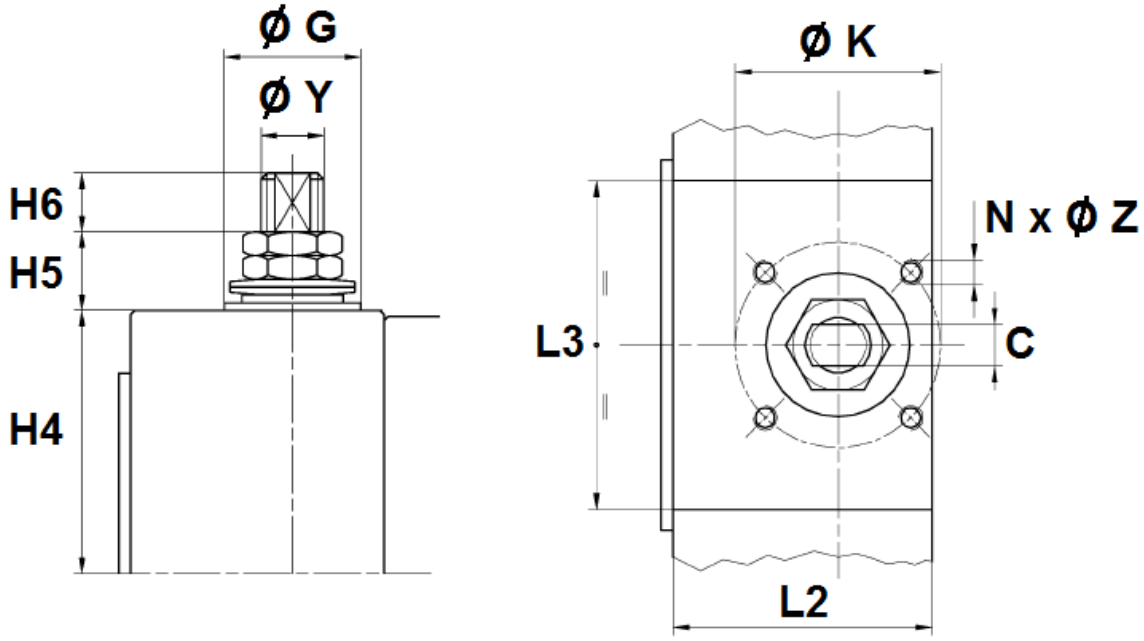
NPS (")	1/2"	3/4"
DN (mm)	15	20
H4	32.5	35
H5	7.5	7.5
H6	7	7
C	6	6
Ø Y	10	10
Ø K	36	36
ISO	F03	F03
N x Ø Z	4 x M5	4 x M5
Ø G	25	25
L2	33	33
L3	69	78

Information provided as an indication and subject to possible modification

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

STEM AND ISO MOUNTING PAD SIZE REF.775 DN 25–150 FA2 TYPE (in mm) :

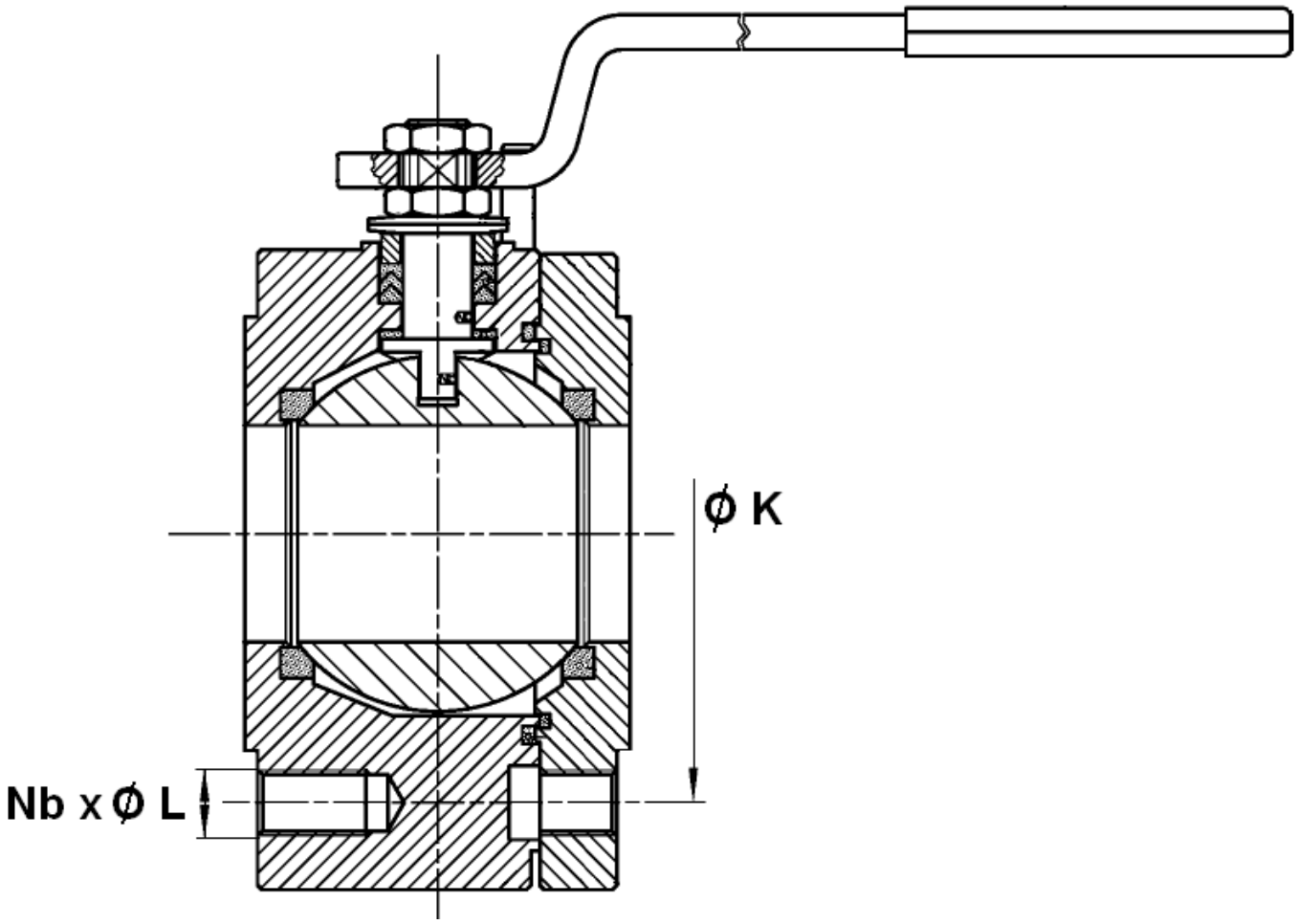
REF. 775 DN 25 – 150 (FA2 TYPE)



NPS (")	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	6"
DN (mm)	25	32	40	50	65	80	100	150
H4	41	46.5	63	65	82	90.5	99.5	144
H5	17	17	13	21	24	24	27	34
H6	10	10	10	10	12	12	17	19
C	8	8	10	10	14	14	18	28
Ø Y	12	12	16	16	22	22	30	42
Ø K	36	36	50	50	70	70	70	125
ISO	F03	F03	F05	F05	F07	F07	F07	F12
N x Ø Z	4 x M5	4 x M5	4 x M6	4 x M6	4 x M8	4 x M8	4 xM8	4 xM12
Ø G	25	25	35	35	55	55	55	85
L2	36.5	41	52	62	79	88	105	150
L3	81	105	81	102	85	80	86	110

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

FLANGES THREADED HOLES SIZE (in mm) :

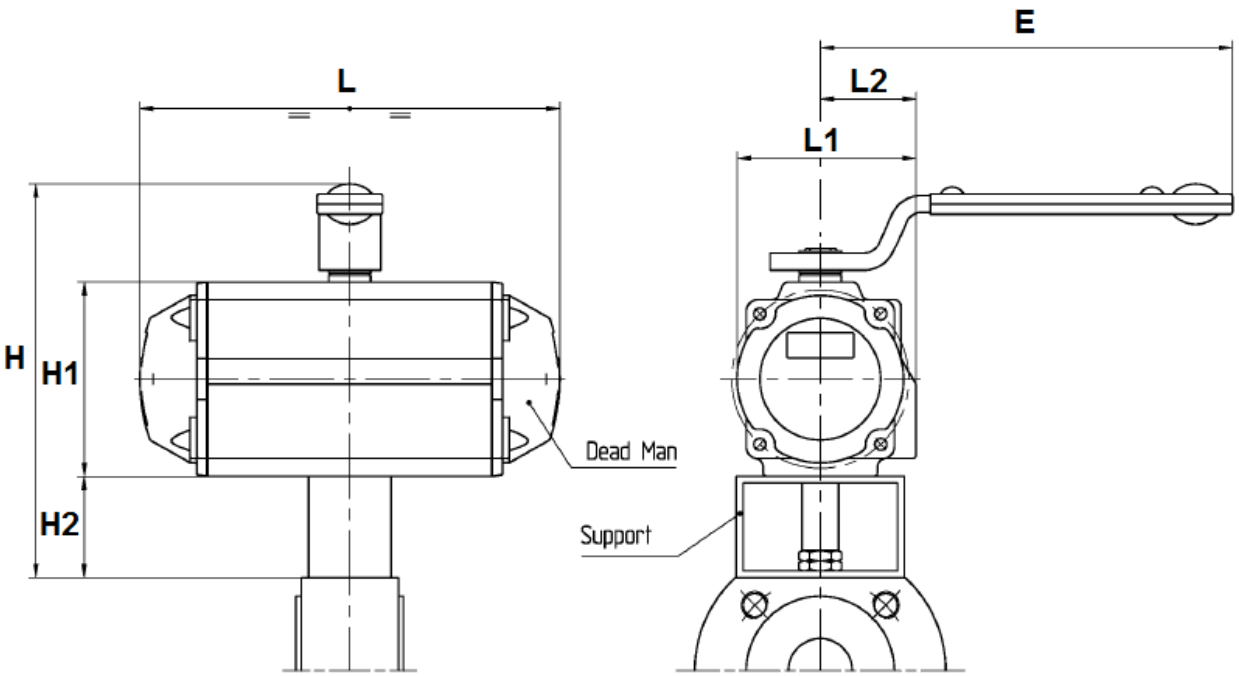


NPS (")	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	6"
DN (mm)	15	20	25	32	40	50	65	80	100	150
Ø K	66.55	82.55	88.9	98.4	114.3	127	149.2	168.3	200	269.9
Nb x Ø L	4 x M14	4 x M16	4 x M16	4 x M16	4 x M20	8 x M16	8 x M20	8 x M20	8 x M20	12 x M20
Suggested screw length	30	30	3	40	45	40	50	50	55	60

Information provided as an indication and subject to possible modification

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

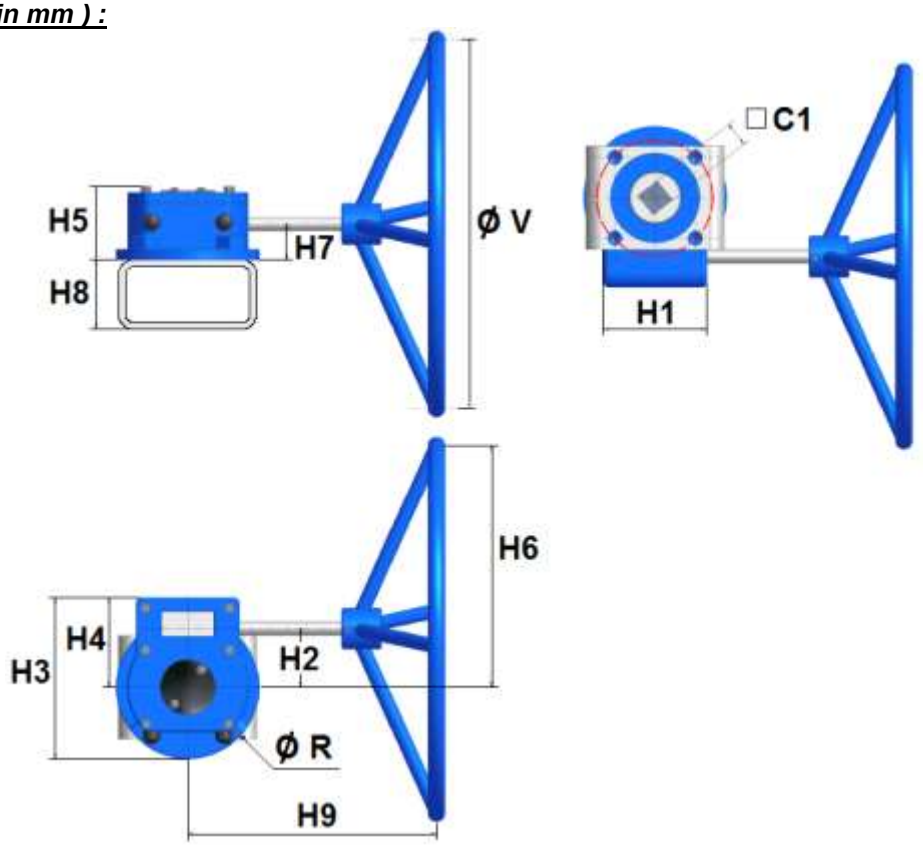
DEADMAN SIZE (in mm) :



NPS (")	1/2"	3/4"	1"	1"1/4	1"1/2	2"
DN (mm)	15	20	25	32	40	50
Ref.	9830160	9830161	9830162	9830163	9830164	9830165
L	142	142	161	161	214	252
L1	70.5	70.5	83.5	83.5	94	105
L2	41.5	41.5	47.5	47.5	51	55.5
E	185	185	185	185	280	370
H	157	157	169	169	215	233
H1	69	69	85	85	102	115
H2	40	40	40	40	60	60

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

GEARBOX SIZE (in mm) :



NPS (")	1/2" - 2"	2"1/2 - 3"	4" - 6"
DN (mm)	15-50	65-80	100-150
C1	22	22	22
H1	57	57	100
H2	46	46	55
H3	98	98	143
H4	50.5	50.5	79.5
H5	56	56	73
H6	106	146	205
H7	34	34	35
H8	60	60	80
H9	117	131	250
Ø R	98	98	143
Ø V	120	200	300
Weight (Kg)	2.2	2.3	4.5
Ref.	9830260	9830261	9830262

WAFER BALL VALVE ADLER TYPES FA1/FA2 CLASS 300 PN50 STAINLESS STEEL

GEARBOX SPECIFICATIONS :

NPS (")	1/2" - 2"	2"1/2 - 3"	4" - 6"
DN (mm)	15-50	65-80	100-150
Ref.	9830260	9830261	9830262
Ratio factor	40 :1	40 :1	37 :1
Input torque (Nm)	35	34	43
Output torque (Nm)	100	150	500

STANDARDS :

- Manufacturer certified ISO 9001:2015
- DIRECTIVE 2014/68/EU : For liquids and gas of Group 1
    - DN15-25 (NPS 1/2"-1") : Article 4, §3 (SEP), no CE marking
    - DN32-100 (NPS 1"1/4-4") : Risk Category II, CE0094 or CE0038 marking
    - DN125-200 (NPS 5"-8") : Risk Category III, CE0094 or CE0038 marking
- Designing according to BS EN 12516-2
- Construction according to ISO 14313
- Materials according to NACE MR 01-75 on request
- Pressure tests according to ANSI B16.34
- Marking according to EN 19
- Fire safe according to ISO 10497
- Fugitive emissions according to ISO 15848-1 : 2003 A Class
- SIL3 according to IEC/EN 61508 (on request)
- ISO 5211 mounting pad
- Length according to EN 558 series 100
- ATEX Group II Category 2 GDc TX Zone 1 & 21 Zone 2 &22 (optional marking)
- On request, ATEX Group II Category 1G/Dc TX Zone 0 & 20

ADVICE : Our opinion and our advice are not guaranteed and SFERACO shall not be liable for the consequences of damages.
The customer must check the right choice of the products with the real service conditions.

Sferaco 90 rue du Ruisseau 38297 St Quentin Fallavier Tel: + 33 (0) 474.94.15.90 Fax: + 33 (0) 474.95.62.08 Internet: www.sferaco.com E-mail : info@sferaco.fr