

## 3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS

3 pieces carbon steel ball valve 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.



Lloyd's  
Register  
PED/2014/68/UE



**NACE  
MR01-75**



Modification of the coating in progress for threaded types

**Size :** DN8 to DN100 (NPS 1/4" to 4")

**Connection :** Threaded BSP or NPT, SW or BW

**Min Temperature :** -28°C

**Max Temperature :** +200°C

**Max Pressure :** 20 to 100 Bars relative to DN

**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 :** Stainless Steel ASTM A351 CF8M body

## 3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS

**SPECIFICATIONS :**

- Full bore
- Anti blow-out stem
- With ISO 5211 mounting pad
- 3 pieces type
- Double antistatic device
- Fire safe ISO 10497 ( up to DN80 ), ISO-FT marking
- Fugitive emissions according to ISO 15848-1 : 2003 Class A
- 3 PTFE filled with 15% graphite chevrons rings on stem
- Packing with elastic rings
- Modification in progress for threaded types :
  - Stainless steel body without painting
  - Carbon steel A105 ends with polyamid epoxy painting blue color RAL5012, 35 µ thickness for carbon steel types replaced by galvanized coating

**USE :**

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Min and max Temperature Ts : - 28°C to + 200°C
- Max pressure Ps :

DN	8	10	15	20	25	32	40	50	65	80	100
Ps ( Bars )	100	100	64	64	40	40	40	40	25	25	20

- Vacuum : 10<sup>-5</sup> torr
- Compressed air (ambient temperature) : 8 bars up to DN50, 6 bars from DN65 to 100
- Steam : 6 bars up to DN50, 3 bars from DN65 to 100

**TORQUE VALUES ( in Nm without safety coefficient ) :**

DN	8	10	15	20	25	32	40	50	65	80	100
Torque ( Nm ) PN100	6	6	-	-	-	-	-	-	-	-	-
Torque ( Nm ) PN64	-	-	7	13.4	-	-	-	-	-	-	-
Torque ( Nm ) PN40	-	-	-	-	14.5	18	33	44	-	-	-
Torque ( Nm ) PN25	-	-	-	-	-	-	-	-	69	84	-
Torque ( Nm ) PN20	-	-	-	-	-	-	-	-	-	-	144

We recommend a safety coefficient of 2 to choose the actuator

**BOLT TIGHTENING TABLE ( in Nm ) :**

DN	8	10	15	20	25	32	40	50	65	80	100
Threading	M5		M6		M8		M10		M12	M14	
Torque (Nm)	6		10.4		24.6		50.1		84.8	135	

## 3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS

### RANGE :

- Stainless steel body with forged carbon steel ends threaded BSP ( NPT on request ), BW or SW **Ref. 712** from DN 8 to DN 100
- Possible with IP67 gear box **Ref. 9830260 à 262** from DN 15 to DN 100

### ACCESSORIES AND OPTIONS :

- Locking device **Ref. 9830140 to 9830145** from DN 8 to DN 100
- Stainless steel handle **Ref. 9830170 to 9830175** from DN 8 to DN 100
- Steel oval handle **Ref. 9830270 to 9830272** from DN 8 to DN 32
- Stainless steel oval handle
- Stainless steel bolting
- Carbon steel stem extension 100 mm **Ref. 9830273 to 9830277** from DN 8 to DN 100
- Stainless steel stem extension 100 mm **Ref. 9830193 to 9830197** from DN 8 to DN 100
- Deadman **Ref. 9830160 to 9830165** from DN 15 to DN 50
- Dry cleaned oxygen **Ref. 9830150 to 9830155** from DN 8 to DN 100
- Standard dry cleaned
- Seat PTFE filled with glass, graphite, stainless steel or metal
- Pocket less seat PTFE or PTFE filled with glass
- Specials coated
- Hole in the ball for overpressure device
- Double o ring on stem

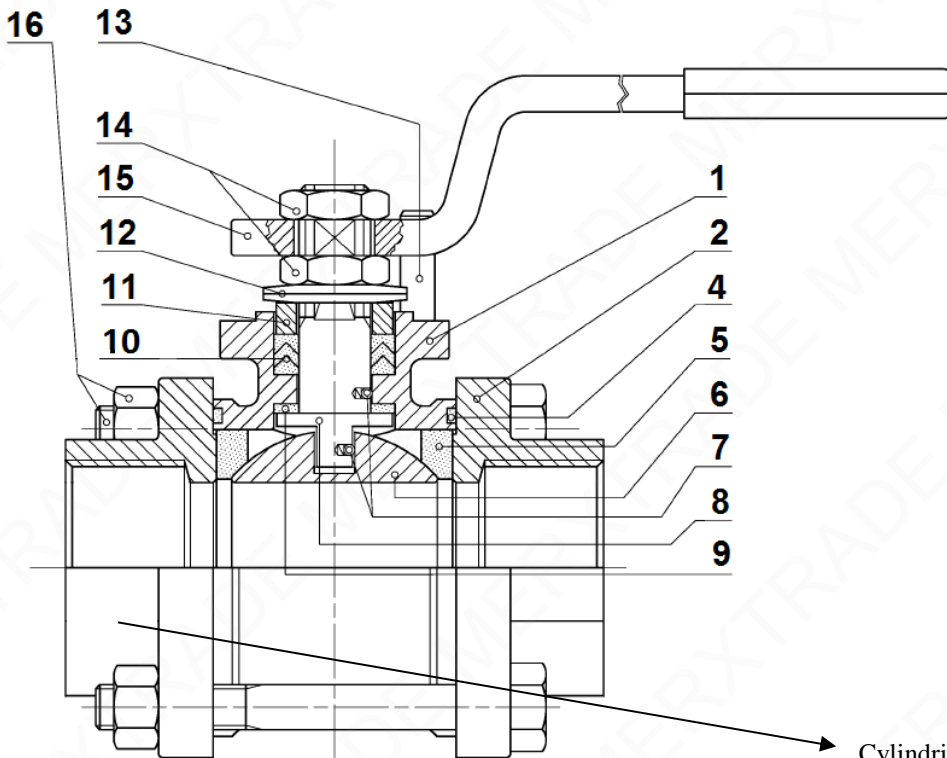
### ENDS :

- Threaded female BSP
- Threaded female NPT ( on request )
- Butt Welding ends
- Socket Welding ends

**3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS**

**MATERIALS :**

**PACKING GASKETS :**



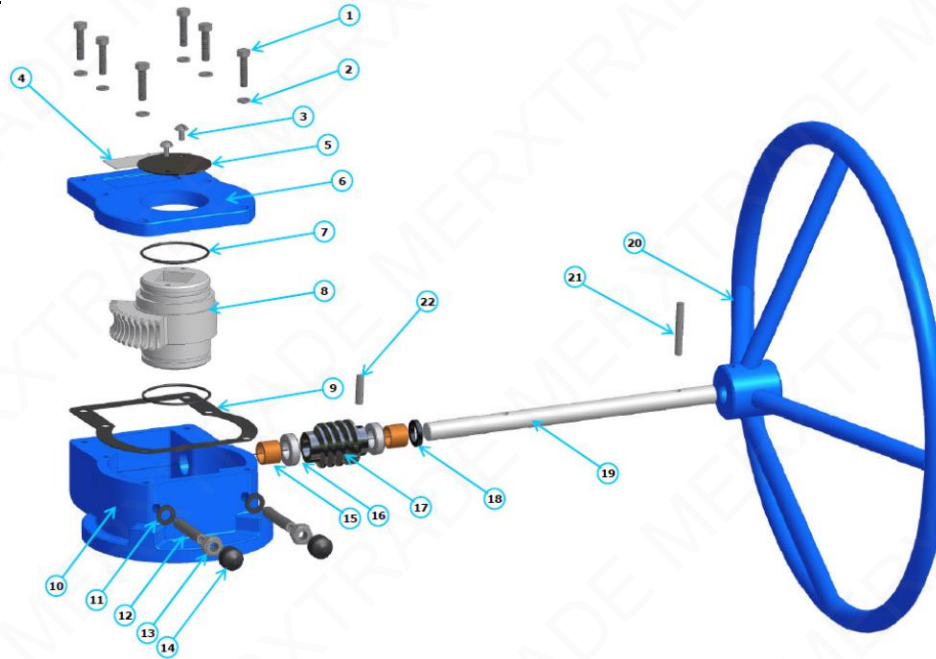
Cylindrical end type from bar (carbon steel type)

Item	Designation	Materials BW-SW Types	Materials BSP-NPT Types
1	Body	ASTM A351 CF8M painted	ASTM A351 CF8M
2	Ends	ASTM A105 painted	ASTM A105 galvanized
4*	Body gasket	PTFE	
5*	Seat	PTFE	
6	Ball DN8-10	ASTM A479 316L	
6	Ball DN15-100	ASTM A479 304L	
7	Double antistatic device	ASTM A479 316/316L	
8	Stem DN 8 – 10	ASTM A479 316L	
8	Stem DN 15 – 100	ASTM A479 304L	
9*	Stem gasket	PTFE	
10*	Chevron packing	PTFE filled with 15% graphite	
11	Gland follower	ASTM A479 S304	
12	Elastic ring	C72 / 50 Cr V4	
13	Pin	UNI 3740 – 8.8	
14	Nut	UNI 3740-6S	
15	Handle	AISI 1010	
16	Bolting	UNI 3740 – 8.8	

(\* : Included in gaskets kit )

## 3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS

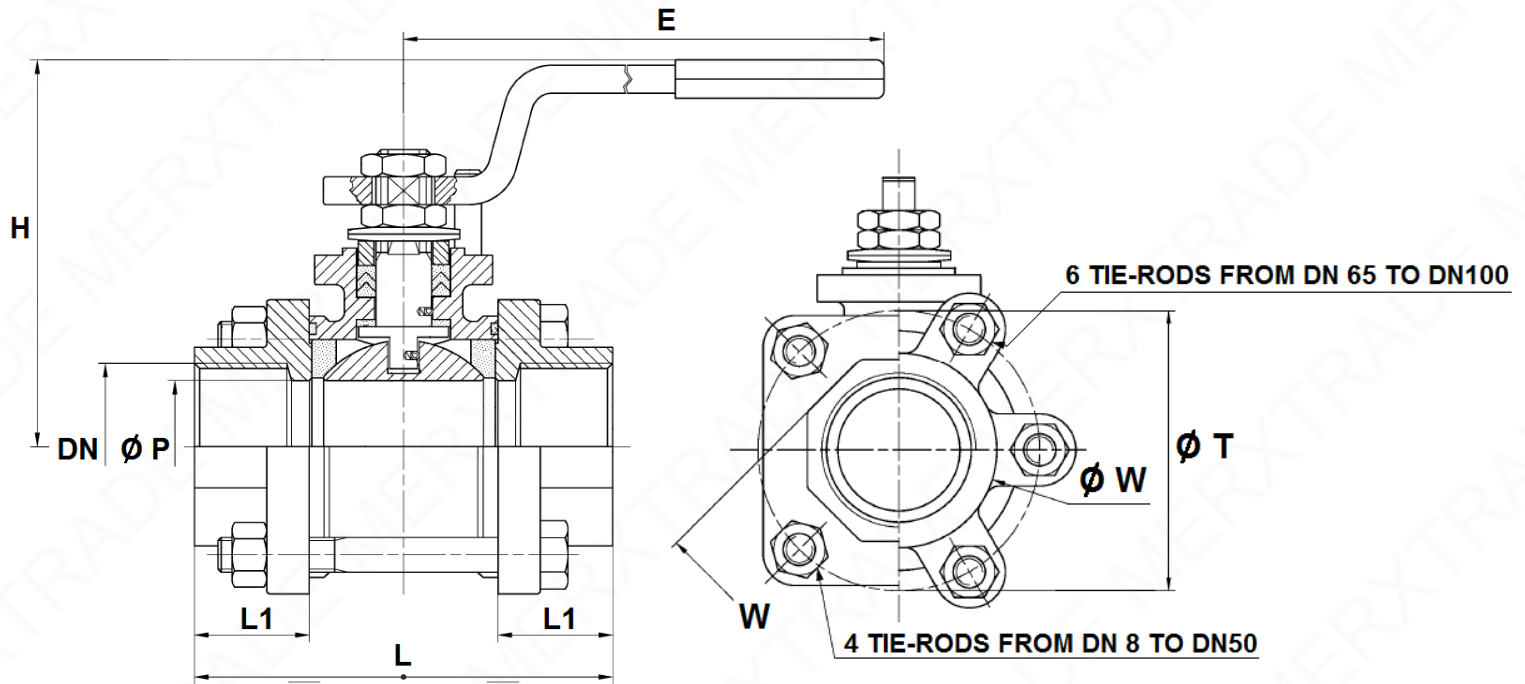
**GEARBOX MATERIALS :**



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

**3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS**

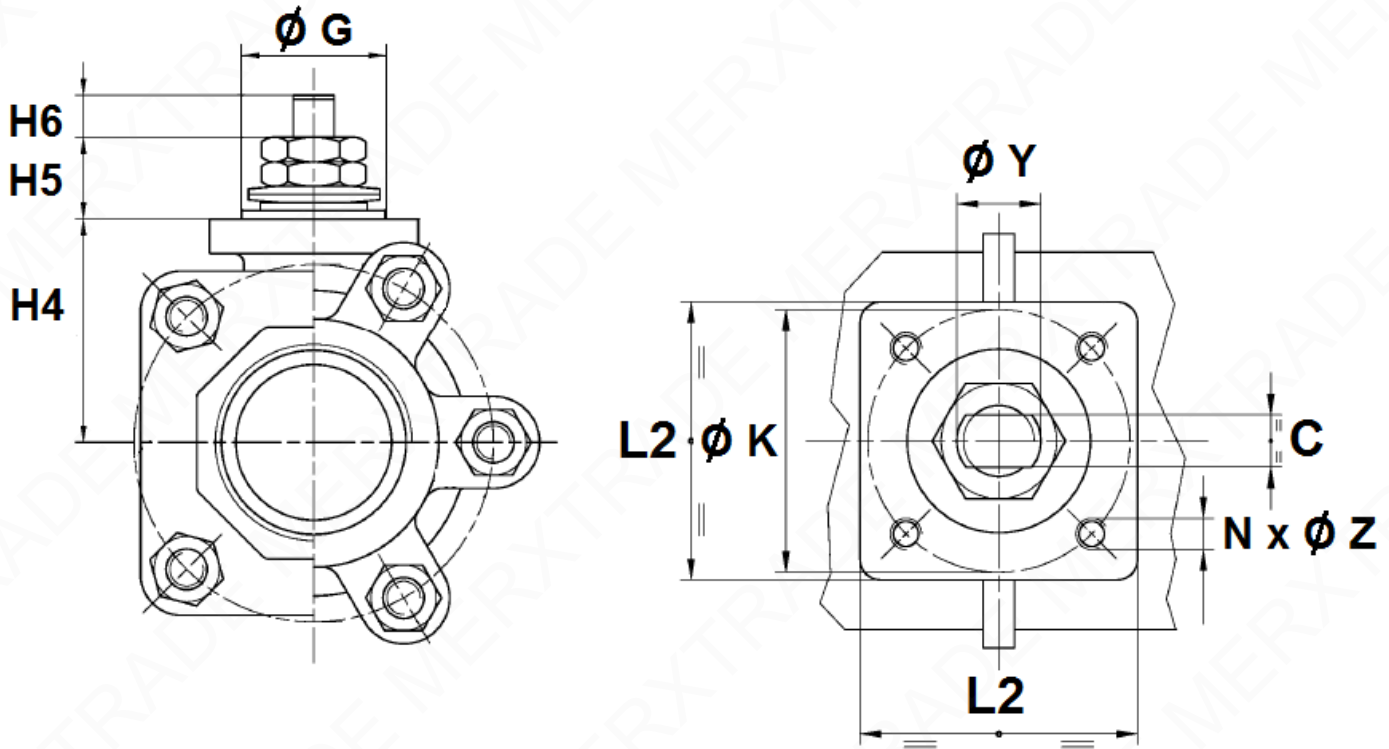
VALVES SIZE ( in mm ) :



DN	8	10	15	20	25	32	40	50	65	80	100
Ø P	10	10	15	19	25	30	38	51	64	76	101
L	50	60	75	80	90	110	120	140	185	205	240
L1	15.1	20.1	24.5	25.7	26.5	32.7	33.2	34.75	50.6	53.4	60
E	120	120	145	145	185	185	280	280	370	370	470
H	46	46	66	68	85	91	106	116	140	148	174
Ø T	34.6	34.6	43.1	49.2	60.8	67.9	84	101.8	123	143	176
W	12	22	26	32	38	47	54	66	82	95.5	122
Weight ( Kg )	0.3	0.35	0.75	0.85	1.35	1.75	3.3	4.9	11	15	23.5

**3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS**

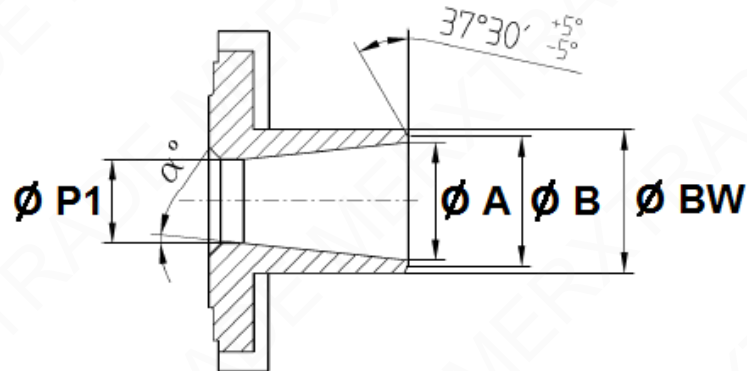
**STEM AND ISO MOUNTING PAD SIZE ( in mm ) :**



DN	8	10	15	20	25	32	40	50	65	80	100
H4	22.2	22.2	32.5	35	41	45.5	53	60.5	77.5	86	99.5
H5	7	7	8	8	17	17	20	20	23	23	26
H6	6	6	7	7	10	10	15	15	17	17	17
C	5	5	6	6	8	8	10	10	14	14	18
Ø Y	8	8	10	10	12	12	16	16	22	22	30
Ø K	36	36	36	36	36	36	50	50	70	70	70
ISO	F03	F03	F03	F03	F03	F03	F05	F05	F07	F07	F07
N x Ø Z	4 x M5	4 x M5	4 x M5	4 x M5	4 x M5	4 x M5	4 x M6	4 x M6	4 x M8	4 x M8	4 x M8
Ø G	25	25	25	25	25	25	35	35	55	55	55
L2	33	33	36	36	36	36	51	51	65	65	70

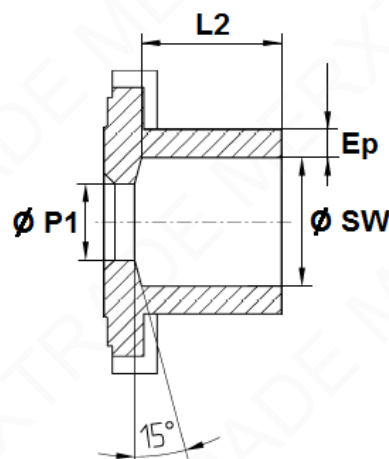
**3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS**

**Butt Welding ends size ( in mm ) :**



DN	8	10	15	20	25	32	40	50	65	80	100
Ø BW	14	18	22	28	34	42.2	49	61	77	90	115
Ø P1	10	10	15	20	25	30	40	50	65	80	100
Ø A	10	13	17	22	28	36.2	43	54	70	82	106
Ø B	12	15	19	24	30	38.2	45	56	72	84	108
α°	0	5	3	4	4	2	5	4	4	5	3

**Socket Welding ends size ( in mm ) :**

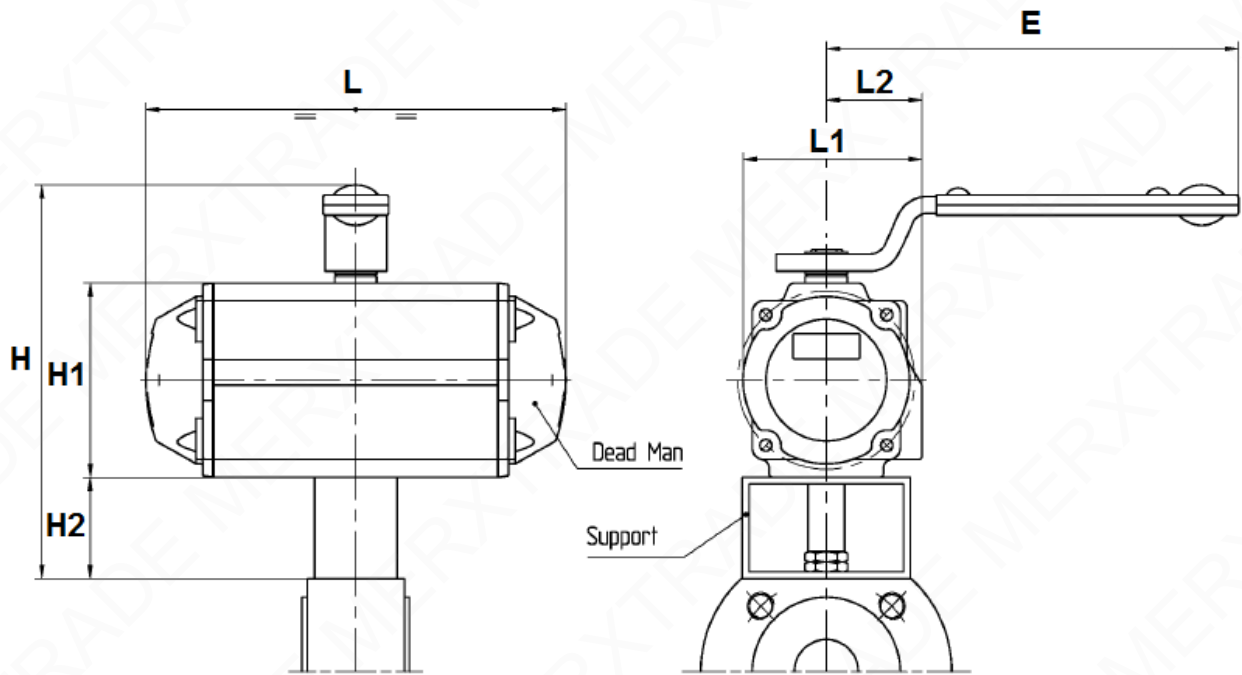


DN	8	10	15	20	25	32	40	50	65	80	100
Ø SW	13.8	17.7	21.8	27.4	34.2	42.8	48.9	61	76.6	89.6	115.5
Ø P1	10	10	15	19	25	30	38	51	64	76	101
L2	10	16.5	21	21	21	26	26.6	27.3	42.5	46	51
Ep	2.1	2.15	2.1	2.3	1.8	2.1	2.55	2.5	2.7	2.95	3.4



**3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS**

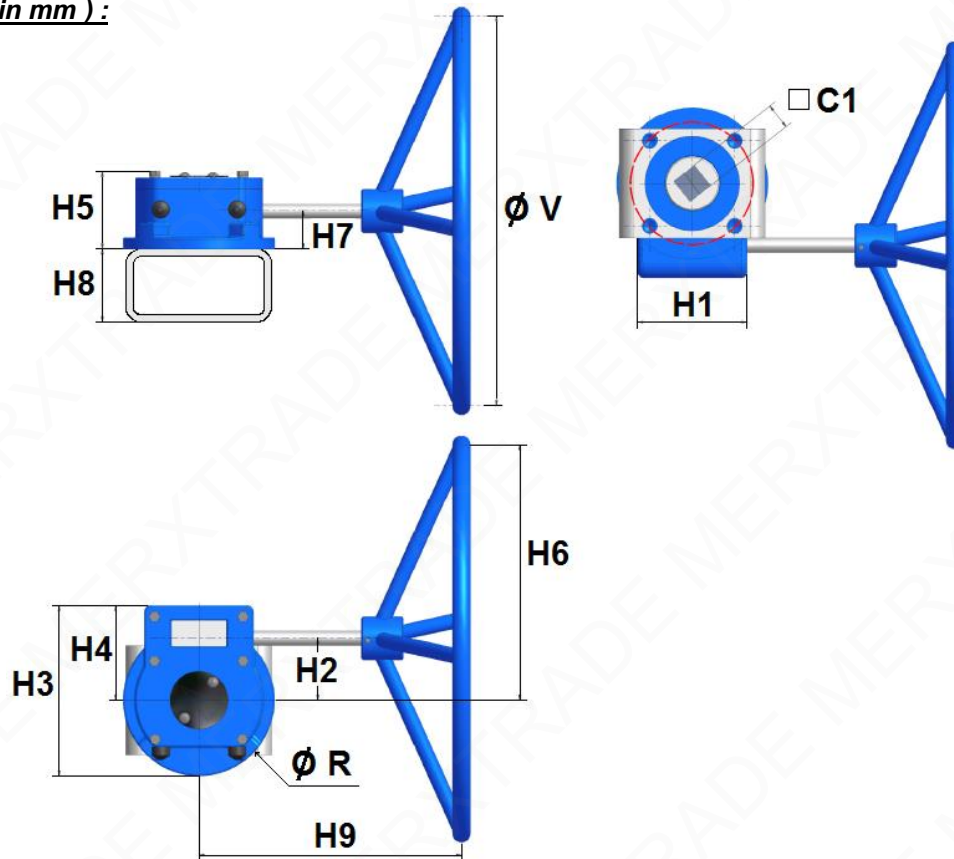
**DEADMAN SIZE ( in mm ) :**



DN	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

**3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS**

GEARBOX SIZE ( in mm ) :



DN	15-50	65-80	100
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

**3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS**

**GEARBOX SPECIFICATIONS :**

DN	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

**TORQUE VALUES ( in Nm without safety coefficient ) :**

DN	8	10	15	20	25	32	40	50	65	80	100
Torque ( Nm ) PN100	6	6	-	-	-	-	-	-	-	-	-
Torque ( Nm ) PN64	-	-	7	13.4	-	-	-	-	-	-	-
Torque ( Nm ) PN40	-	-	-	-	14.5	18	33	44	-	-	-
Torque ( Nm ) PN25	-	-	-	-	-	-	-	-	69	84	-
Torque ( Nm ) PN20	-	-	-	-	-	-	-	-	-	-	144

We recommend a safety coefficient of 2 to choose the actuator

## 3 PIECES BALL VALVE FIRE SAFE ADLER TYPE FP3 WITH A105 ENDS

### STANDARDS :

- Manufacturer certified ISO 9001:2015
- DIRECTIVE 2014/68/EU : CE N° 0038 or 0094  
Risk category III module H
- Certificate 3.1 on request
- Designing according to BS EN 12516-2
- Construction according to ISO 14313
- Materials according to NACE MR 01-75
- Pressure tests according to EN 12266-1, rate A
- Marking according to EN 19
- Fire safe according to ISO 10497:2004 up to DN80
- Fugitive emissions according to ISO 15848-1 : 2003 A Class
- SIL3 according to IEC/EN 61508 ( on request )
- Threaded BSP cylindrical ends according to ISO 7-1 Rp
- Threaded NPT ends according to ANSI B1.20.1 ( on request )
- Butt Welding ends according to UNI EN 12627 ( EX DIN 3239 )
- ISO 5211 mounting pad
- Length according to EN 16722 Series M3 (DIN 3202 M3)
- ATEX Group II Category 2 GDc TX Zone 1 & 21 Zone 2 & ( optional marking )
- On request ATEX Group II Category 1G/Dc TX Zone 0 & 20

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