40 Aniversario

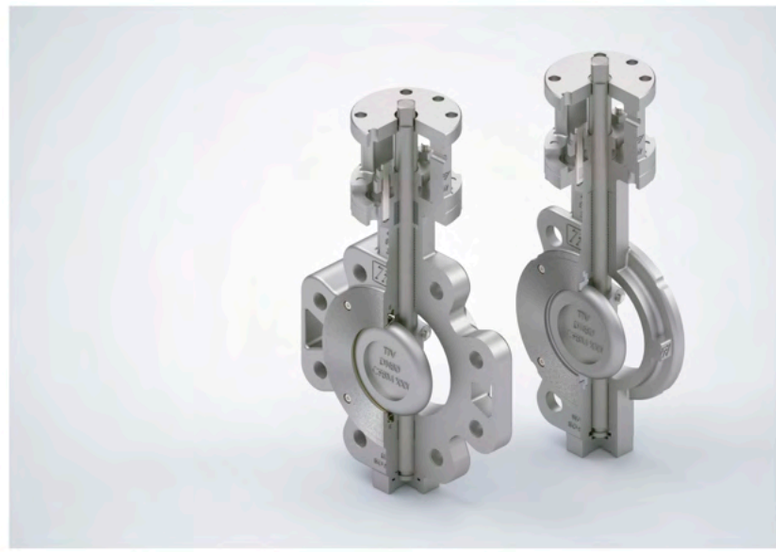
Butterfly valves

Colossus Wafer, Lug & Double Flanged

Valves & Technology

Technical Details

Manufacturing range	DN32 – DN600
Distance between faces	EN 558 Series 20, Serie 13 ISO 5752 Series 20, Serie 13 API 609, EN 593, BS 5155, MSS-SP-68
Mounting between flanges	PN10/16/25/40 - ANSI150 Lbs./300 Lbs.
Flanges	ISO 7005, DIN 2501, BS 4504 ANSI Class 150: ANSI B16.5
Upper flange connection	ISO 5211
Tests	API 598, ANSI/ASME B16.34 BS1560, EN593
Finish	Stainless steel / Steel
Operating pressure	DN32 – DN600 max. 25 bar.



Characteristics

- Double offset of the shaft.
- Longer service life, minimal friction between the disc and the seat.
- Complete watertightness. Class VI - ISO 5208 (Rate A)
- Self-sealing mechanism that guarantees a tight seal and low operating torque.
- The offset shaft allows for easy seat replacement.
- Rapid on-site maintenance.
- High performance.
- Low cost.
- Light weight.
- Same construction, three types of seat: PTFE 100% / R-PTFE, INCONEL, Fire Safe.
- Stainless steel butterfly.
- Stainless steel shaft.
- Possibility of operation with different controls (hand lever, gearbox, pneumatic, electric or hydraulic actuator, etc.).
- Optional threaded retainer.
- Valve construction with vacuum-safe R-PTFE seal.
- TA-LUFT VD 2440 ISO 15848 Design.
- PED 2014/68.
- ATEX 2014/34/EU - ATEX II 2GDc.
- SIL IFC 61508.

General Applications

- Vacuum services
- Chemicals
- Petroleum products
- Ethylene
- LPG/LNG
- Hydrocarbon derivatives
- Steam
- Air
- Sea water
- Saturated water
- Saturated steam
- Heat-insulating gases
- Bitumen / Asphalt
- Corrosive liquids
- Thermal oil
- Cogeneration
- Fire-fighting facilities
- Abrasive materials
- Slurry

SIL/PL Capability No. 968/V 1025.00/18 TÜVRheinland CERTIFIED www.tuv.com ID 0000000000

ATTESTATION DE CONFORMITÉ SANITAIRE 14 ACC LY 011

Applus FDA SEATS Test Report: 891/13/9797 M1

WRAS APPROVED PRODUCT

FDA CODE OF FEDERAL REGULATIONS 21 CFR

ATEX 2014/34/UE

TYPE APPROVAL MARINE & OFFSHORE DIVISION CERTIFICATE No.: 14871/CO BV

CERTIgaz Nº ROB 064

NF ROB-GAZ

DNV

EAC СЕРТИФИКАТ СООТВЕТСТВИЯ

Lloyd's Register LRQA CERTIFICATE OF APPROVAL QUALITY MANAGEMENT SYSTEM STANDARD ISO 9001: 2008 No.: SGI 2202326

Lloyd's Register EC CERTIFICATE OF CONFORMITY DIRECTIVE 97/23/EC

SGS FIRE SAFE TEST FOR VALVES

CE 2014/68/UE

Valve torque (Nm)

DN		Torque (Nm)											
mm	in	PTFE / R-PTFE				METAL				FIRE-SAFE			
		PN10	PN16	PN20	PN25	PN10	PN16	PN20	PN25	PN10	PN16	PN20	PN25
40*	1 1/2"	8	11	14	19	10	14	18	23	9	12	15	20
50*	2"	12	17	20	25	18	19	25	33	14	20	23	29
65*	2 1/2"	20	25	27	30	25	30	44	50	17	29	31	35
80	3"	31	40	42	55	40	50	63	75	36	46	48	63
100	4"	45	58	68	75	48	60	72	85	52	67	78	86
125	5"	52	65	80	105	85	110	215	320	60	75	92	121
150	6"	110	135	160	190	187	229	385	540	127	155	184	219
200	8"	150	226	275	314	300	452	601	750	173	260	316	361
250	10"	206	304	402	471	412	608	769	930	237	350	462	542
300	12"	314	471	588	726	785	1175	1463	1750	361	542	676	835
350	14"	502	795	888	980	885	1370	1640	1910	577	914	852	1127
400	16"	625	985	1071	1157	1320	1530	1818	2105	719	1133	1025	1331
450	18"	950	1190	1272	1354	1505	1880	2385	2890	1093	1369	1325	1557
500	20"	1297	1725	1938	2150	1890	2375	2933	3490	1492	1984	1983	2473
600	24"	1561	2280	2501	2721	2180	2910	4505	6100	1795	2622	2462	3129

(*) Except Double Flange

All of the torques shown in the table have been tested when in wet service. For dry service (non-lubricating, dry gas media), multiply values by 1.15
For lubricating services (cleaning, non-abrasive lubricants), multiply values by 0.85

To obtain additional data and more information, please contact the Technical Department

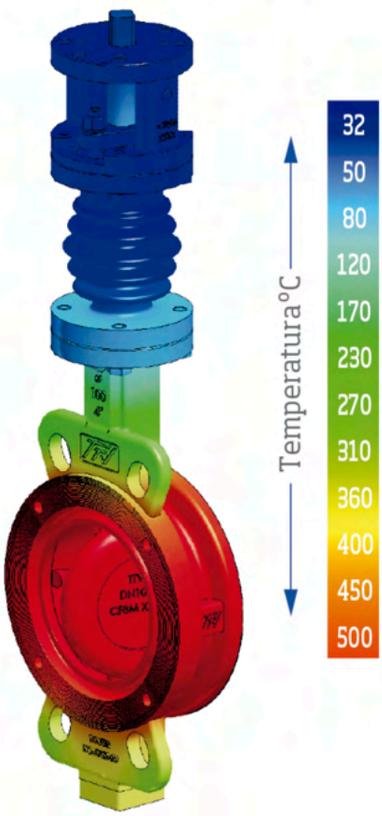
Kv Data

Flow coefficient Kv								
DN	20º	30º	40º	50º	60º	70º	80º	90º
40*	14	20	28	37	42	53	76	75
50*	19	27	35	43	54	65	76	87
65*	17	26	34	43	62	82	101	121
80	40	56	72	88	118	149	179	210
100	40	88	137	186	243	300	355	413
125	54	160	226	372	457	542	626	710
150	71	227	363	499	634	770	906	1042
200	179	432	686	939	1177	1426	1655	1892
250	320	674	1027	1380	1841	2301	2762	3223
300	358	914	1470	2027	2738	3449	4162	4873
350	487	990	1530	2150	2930	3673	4322	5725
400	634	1132	1701	2400	3090	3961	5121	7243
450	596	1373	1915	2731	3313	4632	6534	9863
500	1150	1694	2528	3125	4285	7245	9924	12234
600	1951	3073	4957	6758	9875	12875	16245	20436

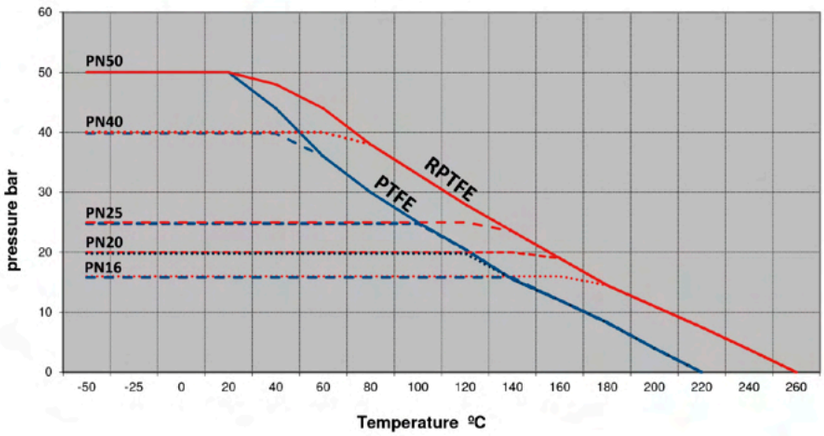
(*) Except Double Flange

Kv: Volume of water in m^3/hr, which will flow through a restriction or valve with a pressure drop of 1 bar at 20ºC

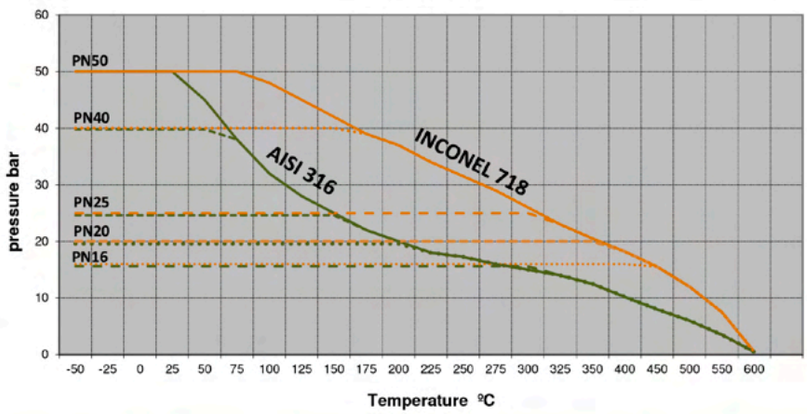
$Cv = 1.16 \cdot KV$



Soft Seat



Metal Seat



Temperature and resistance table:

Name	Applications	Limitations	Temp. Range
PTFE - RPTFE	Vacuum services, chemicals, petroleum, ethylene, LPG/LNG, hydrocarbon derivatives, steam, air, seawater and saturated water.	Alkali metals, trifluorides, elemental fluorine at high temperatures and pressures.	-50ºC to 220ºC
INCONEL	Saturated steam, heat-insulated gases, bitumen, asphalt, corrosive liquids, thermal oil, cogeneration.	Not suitable for food service.	-50ºC to 360ºC
FIRE-SAFE	Fire, abrasives, slurry and vapour protection facilities.	Alkali metals, trifluorides, elemental fluorine at high temperatures and pressures.	-50ºC to 220ºC

Short code: Ej.: 20WX4040 F0

Frame Material		Series		Valve Type		Shaft Material		Disc Material		Seat Material	
20		W		X		40		40		F0	
40	CF-8M	W	Wafer	X	Double eccentric Colossus	40	AISI 316	40	CF-8M	F0	PTFE
50	WCB	L	Lug			95	17-4 PH			F5	RPTFE (PTFE + 25% FIBREGLASS)
51	LCB	H	Double Flange S13			9T	F431			I0	INCONEL
52	LCC									4F	RPTFE + AISI316

Valve assembly and position

1.- Wafer valve assembly

Valves are normally supplied slightly open. Check that they are like this before proceeding to assemble them. Once the space to house the valve has been verified, it is placed in line with the pipe and we insert sealing gaskets.
Next, some studs are positioned to connect it to the pipe.

Later, the butterfly is completely opened to 90º and the rest of the studs are put in place with their nuts. Finally, all of the nuts are tightened by triangulation in order to uniformly tighten all of the studs and not produce any deformations. Finally, it is verified that the valve closes and opens normally.

DN40 - DN250
FREE ASSEMBLY POSITION
(4 positions)

2.- Lug valve assembly

The process is the same as with the wafer valves, with the exception that these valves must be assembled using screws with a length that enables perfect tightness between the flanges of the pipe, and cannot be longer than the corresponding distance.

Mounting position

Soft seat valves are bidirectional and can be installed on resired face, however, metal seat valves should be installed according to he preferred flow direction.

DN300 - DN600
FREE MOUNTING POSITION
(3 positions)

Assembly warnings

- The valve surfaces must be clean and free of dirt.

- The space to house the valve must be wide enough to avoid damaging the joints when inserting the valve.

- Be careful not to hit or scratch the valve during assembly; it could damage the paint.

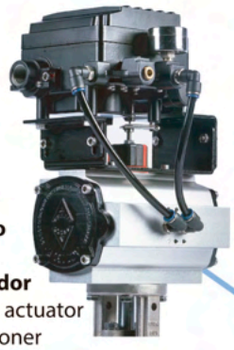
- When assembling heavy valves, make sure that the eyebolts and slings comply with the corresponding safety approvals.

Actuador electrico
Electric actuator

Actuador electrico
Electric actuator

Reductor con volante cadena
Gearbox with chain wheel

Actuador electrico
Electric actuator

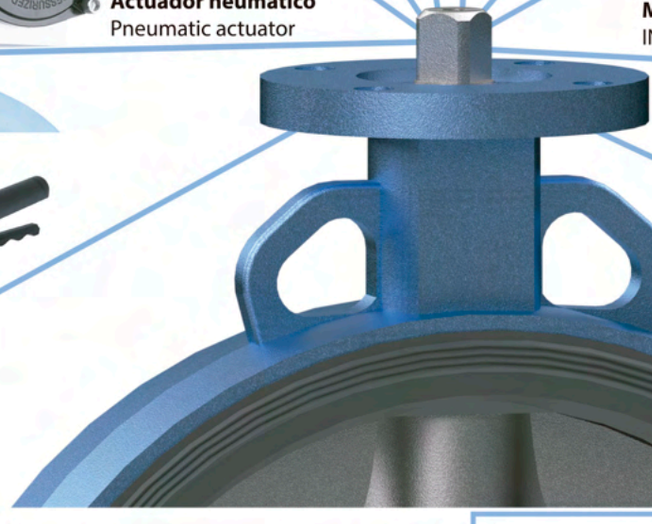


Actuador neumático con posicionador
Pneumatic actuator with positioner

Reductor
Gearbox

Actuador neumático
Pneumatic actuator

Mando palanca INOX
INOX Hand Lever



Mando palanca
Hand Lever

Mando fontanero INOX
INOX Top square drive

All of our valves can be operated through different manual operators and actuators.

We offer assembly, adjustment and testing services for electric or pneumatic actuators and accessories, such as positioners, limit switch boxes or solenoid valves.

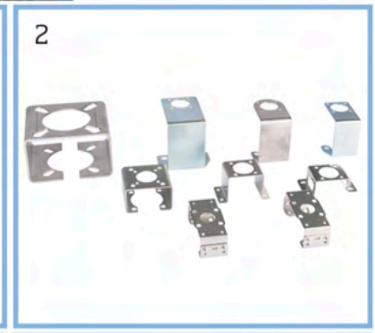
Different types of actuator:

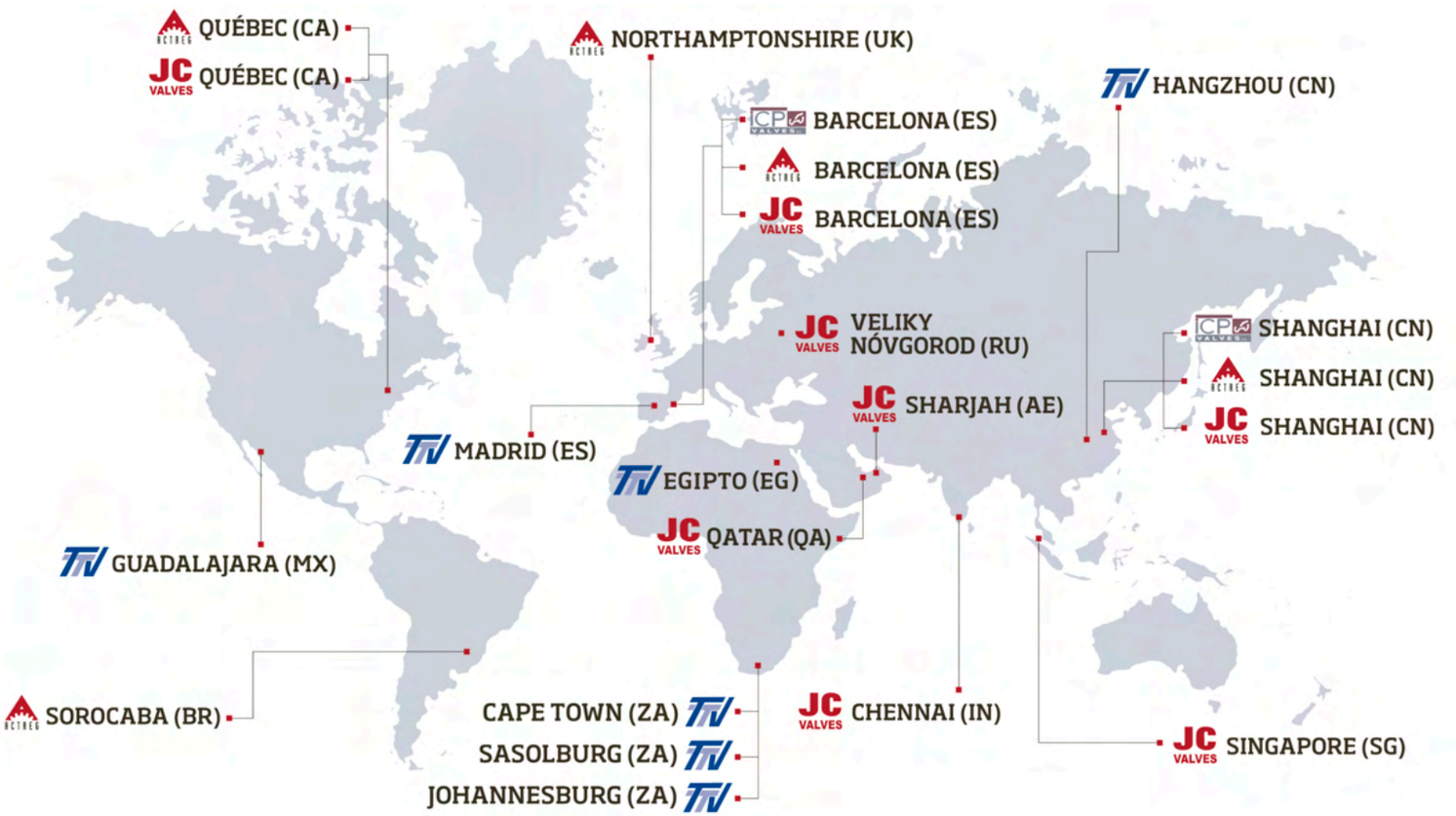
1. ISO 5211 Flange coupling.

2. Structural elements for controls and accessories.

3. Colossus ISO 5211 valve support with multiple connections.

4. Coupling bushings for controls and accessories.





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Wafer Colossus

Valves & Technology

Dimensiones válvulas / *Valve dimensions*

FIG. 1 DN40-400

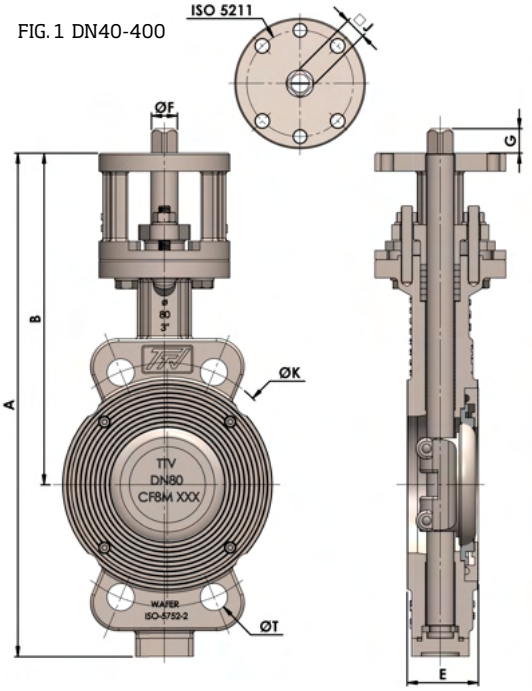
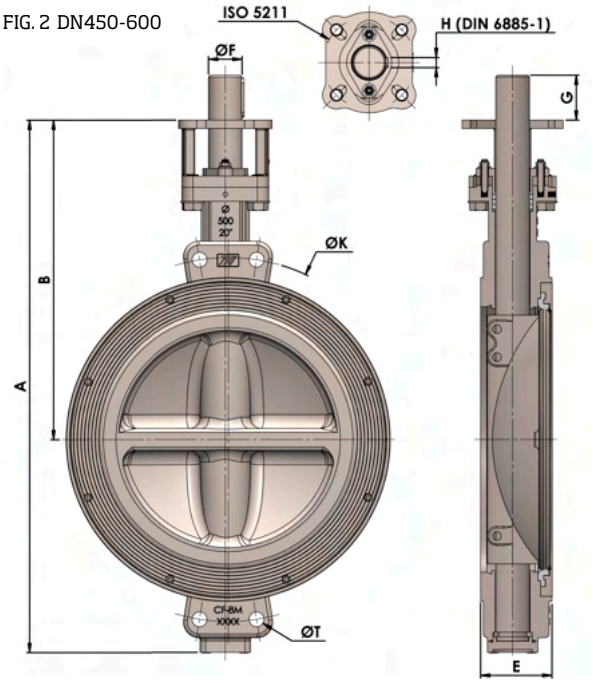


FIG. 2 DN450-600



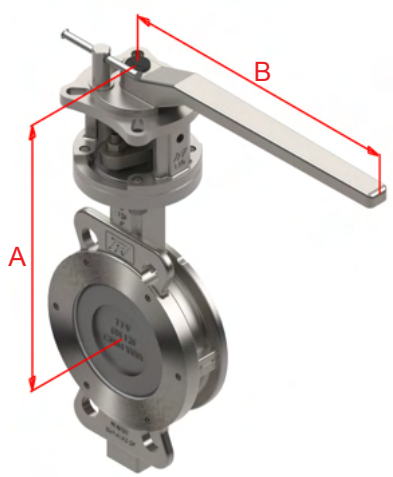
Dimensiones válvulas / *Valves dimensions*										PN10		PN16		PN25		ANSI150	
DN		A	B	E	F	G	J	ISO 5211	Peso *Weight* (Kg)	K	Taladros *Holes*	K	Taladros *Holes*	K	Taladros *Holes*	K	Taladros *Holes*
mm	In										Nº×T		Nº×T		Nº×T		Nº×T
FIG. 1 DN40-400																	
40	1 1/2"	251	191	33	10	14	9*	F05/07	3,2	110	4×18	110	4×18	110	4×18	98,5	4×16
50	2"	288	198	43	12	14	9*	F05/07	4,6	125	4×18	125	4×18	125	4×18	120,6	4×19
65	2 1/2"	298	210	46,5	14	14	11	F05/07	5,3	145	4×18	145	4×18	145	4×18	139,7	4×19
80	3"	329	218	47	17	15	14	F05/07	6,4	160	4×18	160	4×18	160	4×18	152,4	4×19
100	4"	365	239	52	17	18	14	F05/07	8	180	4×18	180	4×18	190	4×23	190,5	4×19
125	5"	430	280	56	21	22	17*	F07/10/12	14	210	4×18	210	4×18	220	4×27	215,9	4×23
150	6"	468	300	56	21	24	17*	F07/10/12	16	240	4×23	240	4×23	250	4×27	241,3	4×23
200	8"	540	345	62	26,5	32	22*	F10/12/14	26	295	4×23	295	4×23	310	4×27	298,5	4×23
250	10"	629	392	70	26,5	39	22*	F12/14/16	42	350	4×23	355	4×27	370	4×30	362	4×26
300	12"	712	434	78	33	50	27*	F12/14/16	58	400	4×23	410	4×27	430	4×30	431,8	4×26
350	14"	767	461	78	36	50	27*	F12/14/16	64	460	4×23	470	4×27	490	4×33	476,3	4×29
400	16"	810	476	102	50	80	-	F12/14/16	103	515	4×27	525	4×30	550	4×36	539,8	4×29
FIG. 2 DN450-600																	
450	18"	861	506	114	50	80	-	F14/16	125	565	4×M24	585	4×M27	600	4×M33	577,9	4×1 1/8"
500	20"	950	570	127	60	80	-	F14/16	162	620	4×M24	650	4×M30	660	4×M33	635	4×1 1/8"
600	24"	1090	630	154	60	90	-	F14/16	271	725	4×M27	770	4×M33	770	4×M36	749,3	4×1 1/4"

• Las dimensiones son nominales +/- 1 mm / *Dimensions are nominal +/- 1 mm*
• Sujeto a cambios sin previo aviso / *Subjet to change without notice*

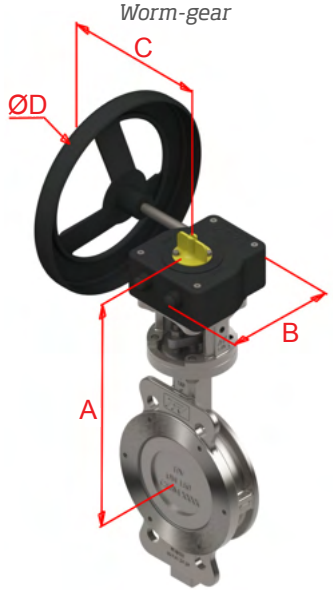
Wafer Colossus

Válvula con accesorios / *Valve with accesories*

Mando palanca
Lever-operated



Reductor
Worm-gear



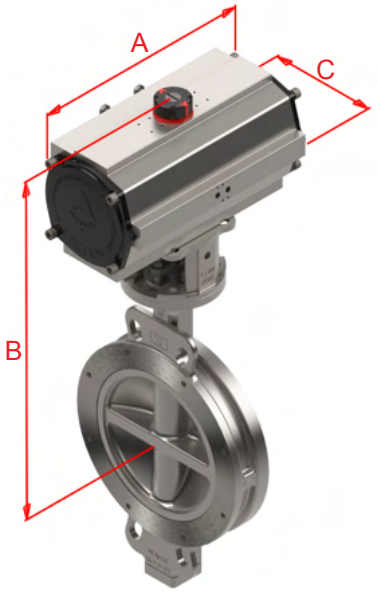
Diámetro nominal		Mando palanca			Reductor					
Nominal size		*Lever-operated*			*Worm-gear*					
(mm)	In	A	B	Peso *Weight*	Modelo *Model*	A	B	C	ØD	Peso *Weight*
40	1 1/2"	240	205	3,5	AM1-TTV	219	100	116	140	4,6
50	2"	247	205	4,9	AM1-TTV	226	100	116	140	6
65	2 1/2"	259	205	5,6	AM1-TTV	238	100	116	140	7,2
80	3"	267	205	6,7	AM1-TTV	246	100	120	200	8,2
100	4"	288	330	8,5	AM1-TTV	267	100	120	200	9,8
125	5"	329	330	14,5	AM2-TTV	320	142	223	300	18
150	6"	349	330	16,5	AM2-TTV	340	142	223	300	20
200	8"	-	-	-	AM2-TTV	380	142	223	300	30
250	10"	-	-	-	AM3-TTV	443	185	322	400	51,5
300	12"	-	-	-	AM3-TTV	485	185	322	400	67,5
350	14"	-	-	-	AM3-TTV	512	185	322	400	73,5
400	16"	-	-	-	ARC10	518	200	381	600	122
450	18"	-	-	-	ARC11	554	220	402	600	152
500	20"	-	-	-	ARC12	625	285	447	700	200
600	24"	-	-	-	ARC12	685	285	447	700	309

Wafer Colossus PTFE / R-PTFE

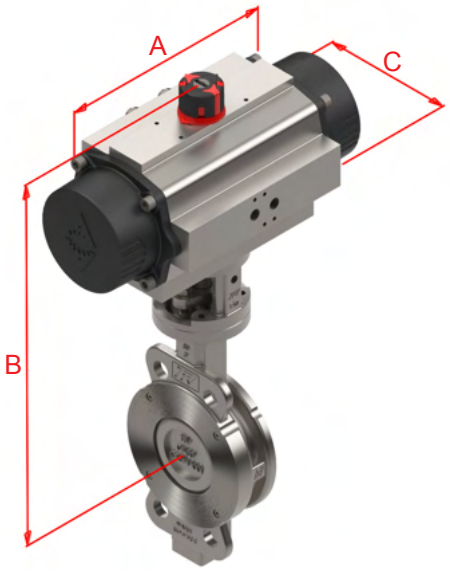
Valves & Technology

Válvula con accesorios / *Valve with accesories*

Actuador neumático doble efecto
Double acting actuator



Actuador neumático simple efecto
Spring Return Actuator



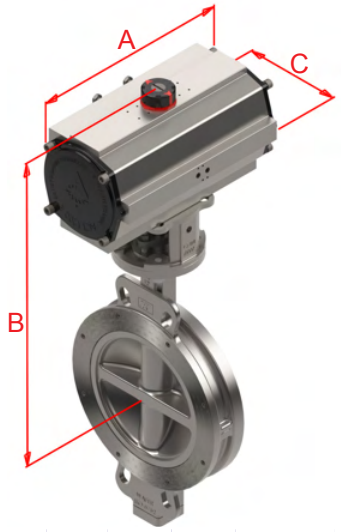
DN		ACT. NEUMÁTICO DOBLE EFECTO *DOUBLE ACTING PNEUMATIC ACT.*					ACT. NEUMÁTICO SIMPLE EFECTO / SPRING RETURN PNEUMATIC ACR.													
		PN10 / 16 / 20 / 25 / ANSI 150					*PN10 / 16*					*PN20 / ANSI 150*					*PN25*				
(mm)	In	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.
40	1 1/2"	ADA 40	158	306	91	5,5	ASR 80	217	328	111	7	ASR 80	217	328	111	7	ASR 80	217	328	111	7
50	2"	ADA 40	158	313	91	6,5	ASR 80	217	335	111	8,5	ASR 80	217	335	111	8,5	ASR 80	217	335	111	8,5
65	2 1/2"	ADA 40	158	325	91	7,5	ASR 80	217	347	111	9	ASR 80	217	347	111	9	ASR 80	217	347	111	9
80	3"	ADA 80	177	355	111	9,5	ASR 200	299	383	135.5	13,5	ASR 200	299	383	135.5	13,5	ASR 200	299	383	135.5	13,5
100	4"	ADA 130	196	386	122	12	ASR 200	299	404	135.5	15,5	ASR 300	348.5	421	152.5	19	ASR 300	348.5	421	152.5	19
125	5"	ADA 200	225	445	135.5	19,5	ASR 300	348.5	462	152.5	25	ASR 300	348.5	462	152.5	25	ASR 300	348.5	642	152.5	25
150	6"	ADA 300	273	482	152.5	24,5	ASR 500	397	499	173	31,5	ASR 850	473	521	191.5	38	ASR 850	473	521	191.5	38
200	8"	ADA 500	304	539	173	37	ASR 850	473	561	191.5	48	ASR 1200	560	589	212.5	60,5	ASR 1200	560	589	212.5	60,5
250	10"	ADA 850	372	613	191.5	59	ASR 1200	560	641	212.5	76,5	ASR 1750	601	672	242.5	88	ASR 1750	601	672	242.5	88
300	12"	ADA 1200	439	683	212.5	84	ASR 1750	601	714	242.5	104	ASR 1750	601	714	242.5	104	ASR 2100	702	747	276.5	126
350	14"	ADA 1750	461	741	242.5	96,5	ASR 2100	702	774	276.5	132	ASR 2100	702	774	276.5	132	ASR 2500	738	844	356	164
400	16"	ADA 2100	510	789	276.5	152,5	ASR 2500	738	859	356	203	ASR 2500	738	859	356	203	ASR 2500	738	859	356	203
450	18"	ADA 2500	518	889	356	194,5	ASR 2500	738	889	356	225	ASR 2500	738	889	356	225	ASR 2500	738	889	356	225
500	20"	ADA 2500	518	953	356	231,5	ASR 2500	738	953	356	262	ASR 4000	940	1004	415	345	ASR 4000	940	1004	415	345
600	24"	ADA 2500	518	1013	356	340,5	ASR 4000	940	1064	415	454	ASR 4000	940	1064	415	454	ASR 4000	940	1064	415	454

Wafer Colossus METAL

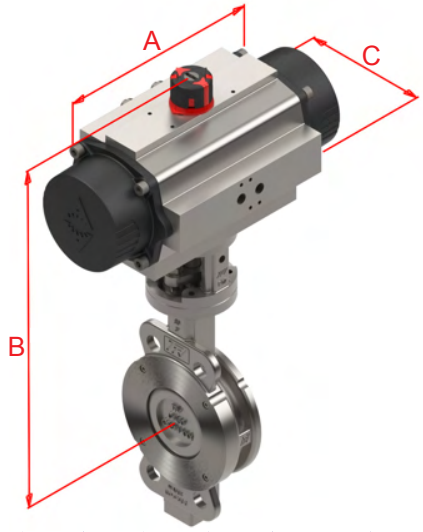
Valves & Technology

Válvula con accesorios / *Valve with accesories*

Actuador neumático doble efecto
Double acting actuator



Actuador neumático simple efecto
Spring Return Actuator



DN		ACT. NEUMÁTICO DOBLE EFECTO / DOUBLE ACTING PNEUMATIC ACT.																			
		PN10					*PN16*					*PN20 / ANSI 150*					*PN25*				
(mm)	In	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.
40	1 1/2"	ADA 40	158	306	91	5,5	ADA 40	158	306	91	5,5	ADA 40	158	306	91	5,5	ADA 40	158	306	91	5,5
50	2"	ADA 40	158	313	91	6,5	ADA 40	158	313	91	6,5	ADA 40	158	313	91	6,5	ADA 80	177	335	111	7,5
65	2 1/2"	ADA 40	158	325	91	7,5	ADA 40	158	325	91	7,5	ADA 80	177	347	111	8,5	ADA 80	177	347	111	8,5
80	3"	ADA 80	177	355	111	9,5	ADA 80	177	355	111	9,5	ADA 130	196	365	122	10	ADA 130	196	365	122	10
100	4"	ADA 130	196	386	122	12	ADA 130	196	386	122	12	ADA 130	196	386	122	12	ADA 130	196	386	122	12
125	5"	ADA 200	225	445	135.5	19,5	ADA 200	225	445	135.5	19,5	ADA 300	273	462	152.5	22,5	ADA 500	304	479	173	25
150	6"	ADA 500	304	499	173	27	ADA 500	304	499	173	27	ADA 850	372	521	191.5	33	ADA 1200	439	549	212.5	42
200	8"	ADA 500	304	539	173	37	ADA 850	372	561	191.5	43	ADA 1200	439	589	212.5	52	ADA 1200	439	589	212.5	52
250	10"	ADA 850	372	613	191.5	59	ADA 1200	439	641	212.5	68	ADA 1200	439	641	212.5	68	ADA 1750	461	672	242.5	75
300	12"	ADA 1750	461	714	242.5	91	ADA 2100	510	747	276.5	107,5	ADA 2100	510	747	276.5	107,5	ADA 2500	518	817	356	127,5
350	14"	ADA 1750	461	741	242.5	97	ADA 2100	510	774	276.5	116,5	ADA 2500	518	844	356	133,5	ADA 2500	518	844	356	133,5
400	16"	ADA 2100	510	789	276.5	152,5	ADA 2100	510	789	276.5	152,5	ADA 2500	518	859	356	172,5	ADA 2500	518	859	356	172,5
450	18"	ADA 2100	510	819	276.5	174,5	ADA 2100	510	819	276.5	174,5	ADA 2500	518	889	356	194,5	ADA 2500	518	889	356	194,5
500	20"	ADA 2100	510	883	276.5	211,5	ADA 2500	518	953	356	231,5	ADA 2500	518	953	356	231,5	ADA 4000	630	1004	415	291,5
600	24"	ADA 2500	518	1013	356	340,5	ADA 2500	518	1013	356	340,5	ADA 4000	630	1064	415	400,5	-	-	-	-	-

DN		ACT. NEUMÁTICO SIMPLE EFECTO / SPRING RETURN PNEUMATIC ACR.																			
40	1 1/2"	ASR 80	217	328	111	7	ASR 80	217	328	111	7	ASR 80	217	328	111	7	ASR 80	217	328	111	7
50	2"	ASR 80	217	335	111	8,5	ASR 80	217	335	111	8,5	ASR 80	217	335	111	8,5	ASR 130	258	345	122	9,5
65	2 1/2"	ASR 80	217	347	111	9	ASR 130	258	357	122	10	ASR 130	258	357	122	10	ASR 200	299	375	135.5	12,5
80	3"	ASR 130	258	365	122	11	ASR 200	299	383	135.5	13,5	ASR 200	299	383	135.5	13,5	ASR 300	348.5	400	152.5	17
100	4"	ASR 200	299	404	135.5	15,5	ASR 200	299	404	135.5	15,5	ASR 200	299	404	135.5	15,5	ASR 300	348.5	421	152.5	19
125	5"	ASR 300	348.5	462	152.5	25	ASR 500	397	479	173	29,5	ASR 850	473	501	191.5	36	ASR 1200	560	529	212.5	48,5
150	6"	ASR 850	473	521	191.5	38	ASR 850	473	521	191.5	38	ASR 1200	560	549	212.5	50,5	ASR 1750	601	580	242.5	62
200	8"	ASR 1200	560	589	212.5	60,5	ASR 1750	601	620	242.5	72	ASR 1750	601	620	242.5	72	ASR 2100	702	653	276.5	94
250	10"	ASR 1750	601	672	242.5	88	ASR 1750	601	672	242.5	88	ASR 2100	702	705	276.5	110	ASR 2500	738	775	356	142
300	12"	ASR 2100	702	747	276.5	126	ASR 2500	738	817	356	158	ASR 4000	940	868	415	241	ASR 4000	940	868	415	241
350	14"	ASR 2100	702	774	276.5	132	ASR 4000	940	895	415	247	ASR 4000	940	895	415	247	ASR 4000	940	895	415	247
400	16"	ASR 4000	940	910	415	286	ASR 4000	940	910	415	286	ASR 4000	940	910	415	286	ASR 4000	940	910	415	286
450	18"	ASR 4000	940	940	415	308	ASR 4000	940	940	415	308	ASR 4000	940	940	415	308	ASR 4000	940	910	415	308
500	20"	ASR 4000	940	1004	415	345	ASR 4000	940	1004	415	345	-	-	-	-		-	-	-	-	
600	24"	ASR 4000	940	1064	415	454	ASR 4000	940	1064	415	454	-	-	-	-		-	-	-	-	

Lug Colossus

Dimensiones válvulas / *Valve dimensions*

FIG. 1 DN40-400

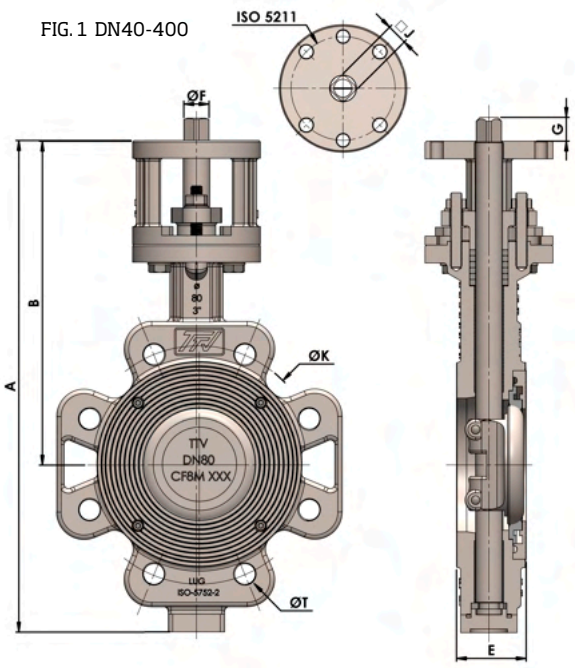
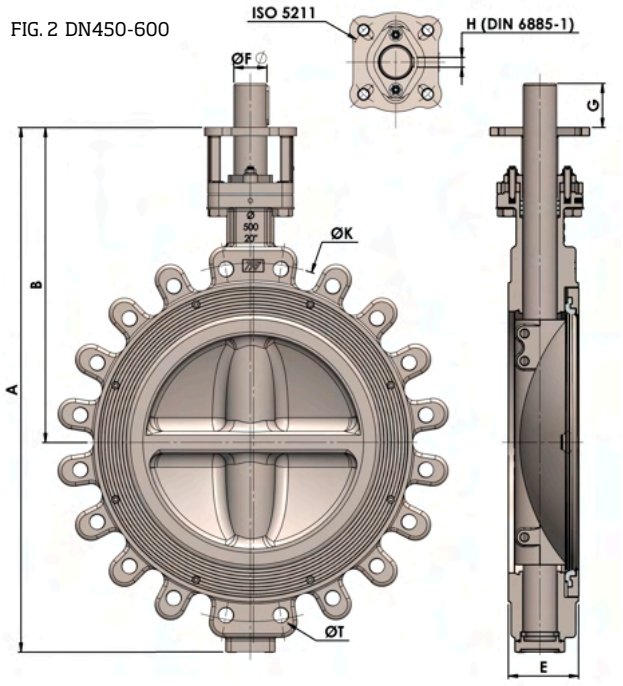


FIG. 2 DN450-600



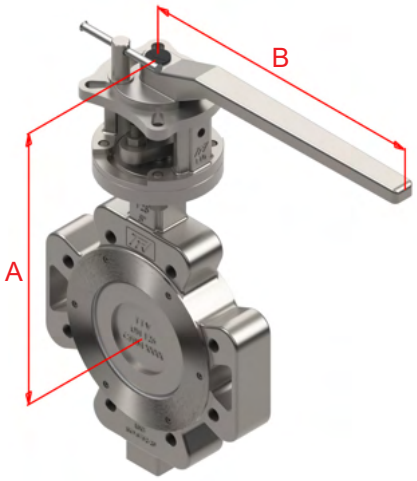
Dimensiones válvulas / *Valves dimensions*										PN10		PN16		PN25		ANSI150	
DN		A	B	E	F	G	J	ISO 5211	Peso *Weight* (Kg)	K	Taladros *Holes*	K	Taladros *Holes*	K	Taladros *Holes*	K	Taladros *Holes*
mm	In										Nº×T		Nº×T		Nº×T		Nº×T
FIG. 1 DN40-400																	
40	1 1/2"	251	191	33	10	14	9*	F05/07	4	110	4×M16	110	4×M16	110	4×M16	98,5	4×1/2"
50	2"	288	198	43	12	14	9*	F05/07	6	125	4×M16	125	4×M16	125	4×M16	120,6	4×5/8"
65	2 1/2"	298	210	46,5	14	14	11	F05/07	7	145	4×M16	145	4×M16	145	8×M16	139,7	4×5/8"
80	3"	329	218	47	17	15	14	F05/07	9	160	8×M16	160	8×M16	160	8×M16	152,4	4×5/8"
100	4"	365	239	52	17	18	14	F05/07	14	180	8×M16	180	8×M16	190	8×M20	190,5	8×5/8"
125	5"	430	280	56	21	22	17*	F07/10/12	18	210	8×M16	210	8×M16	220	8×M24	215,9	8×3/4"
150	6"	468	300	56	21	24	17*	F07/10/12	20	240	8×M20	240	8×M20	250	8×M24	241,3	8×3/4"
200	8"	540	345	62	26,5	32	22*	F10/12/14	35	295	8×M20	295	12×M20	310	12×M24	298,5	8×3/4"
250	10"	629	392	70	26,5	39	22*	F12/14/16	49	350	12×M20	355	12×M24	370	12×M27	362	12×7/8"
300	12"	712	434	78	33	50	27*	F12/14/16	65	400	12×M20	410	12×M24	430	16×M27	431,8	12×7/8"
350	14"	767	461	78	36	50	27*	F12/14/16	86	460	16×M20	470	16×M24	490	16×M30	476,3	12×1"
400	16"	810	476	102	50	80	-	F12/14/16	145	515	16×M24	525	16×M27	550	16×M33	539,8	16×1"
FIG. 2 DN450-600																	
450	18"	861	506	114	50	80	-	F14/16	169	565	20×M24	585	20×M27	600	20×M33	577,9	16×1 1/8"
500	20"	950	570	127	60	80	-	F14/16	225	620	20×M24	650	20×M30	660	20×M33	635	20×1 1/8"
600	24"	1090	630	154	60	90	-	F14/16	370	725	20×M27	770	20×M33	770	20×M36	749,3	20×1 1/4"

- Las dimensiones son nominales +/- 1 mm / *Dimensions are nominal +/- 1 mm*
- Sujeto a cambios sin previo aviso / *Subjet to change without notice*

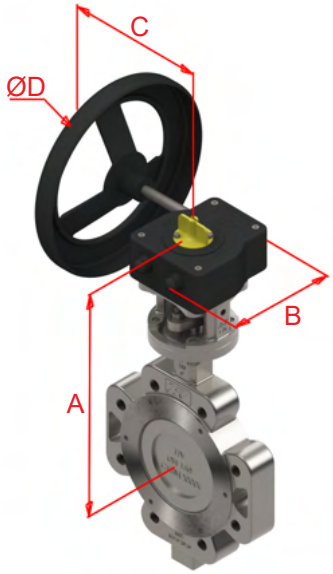
Lug Colossus

Válvula con accesorios / *Valve with accesories*

Mando palanca
Lever-operated



Reductor
Worm-gear



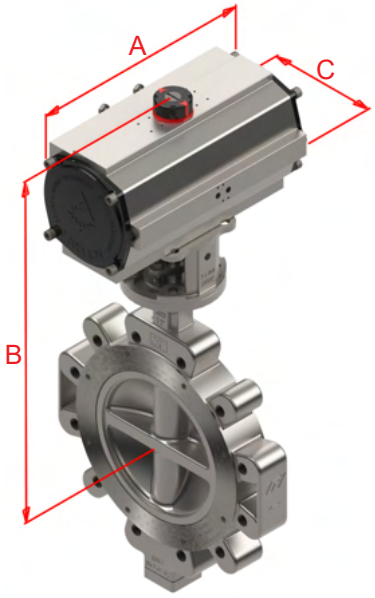
Diámetro nominal		Mando palanca			Reductor					
Nominal size		*Lever-operated*			*Worm-gear*					
(mm)	In	A	B	Peso *Weight*	Modelo *Model*	A	B	C	ØD	Peso *Weight*
40	1 1/2"	240	205	4,3	AM1-TTV	219	100	116	140	5,4
50	2"	247	205	6,3	AM1-TTV	226	100	116	140	7,4
65	2 1/2"	259	205	7,3	AM1-TTV	238	100	116	140	8,4
80	3"	267	205	9,3	AM1-TTV	246	100	120	200	10,8
100	4"	288	330	14,5	AM1-TTV	267	100	120	200	15,8
125	5"	329	330	18,5	AM2-TTV	320	142	223	300	22
150	6"	349	330	20,5	AM2-TTV	340	142	223	300	24
200	8"	-	-	-	AM2-TTV	380	142	223	300	39
250	10"	-	-	-	AM3-TTV	443	185	322	400	58,5
300	12"	-	-	-	AM3-TTV	485	185	322	400	74,5
350	14"	-	-	-	AM3-TTV	512	185	322	400	95,5
400	16"	-	-	-	ARC10	518	200	381	600	164
450	18"	-	-	-	ARC11	554	220	402	600	196
500	20"	-	-	-	ARC12	625	285	447	700	263
600	24"	-	-	-	ARC12	685	285	447	700	408

Lug Colossus PTFE / R-PTFE

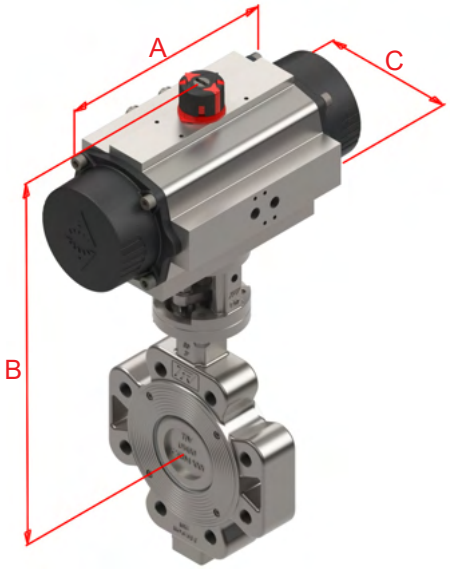
Valves & Technology

Válvula con accesorios / *Valve with accesories*

Actuador neumático doble efecto
Double acting actuator



Actuador neumático simple efecto
Spring Return Actuator



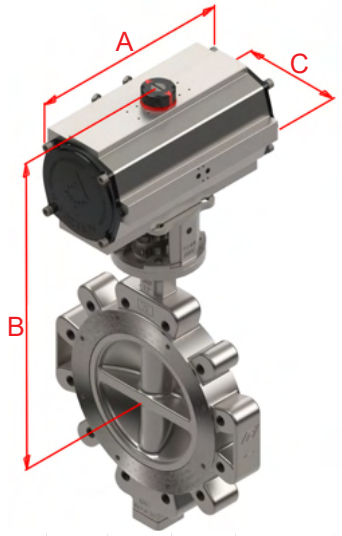
DN		ACT. NEUMÁTICO DOBLE EFECTO *DOUBLE ACTING PNEUMATIC ACT.*					ACT. NEUMÁTICO SIMPLE EFECTO / SPRING RETURN PNEUMATIC ACR.													
		PN10 / 16 / 20 / 25 / ANSI 150					*PN10 / 16*					*PN20 / ANSI 150*					*PN25*				
(mm)	In	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.
40	1 1/2"	ADA 40	158	306	91	6	ASR 80	217	328	111	7,5	ASR 80	217	328	111	7,5	ASR 80	217	328	111	7,5
50	2"	ADA 40	158	313	91	8	ASR 80	217	335	111	9,5	ASR 80	217	335	111	9,5	ASR 80	217	335	111	9,5
65	2 1/2"	ADA 40	158	325	91	9	ASR 80	217	347	111	10,5	ASR 80	217	347	111	10,5	ASR 80	217	347	111	10,5
80	3"	ADA 80	177	355	111	12	ASR 200	299	383	135.5	16,5	ASR 200	299	383	135.5	16,5	ASR 200	299	383	135.5	16,5
100	4"	ADA 130	196	386	122	18	ASR 200	299	404	135.5	21,5	ASR 300	348.5	421	152.5	25	ASR 300	348.5	421	152.5	25
125	5"	ADA 200	225	445	135.5	23,5	ASR 300	348.5	462	152.5	29	ASR 300	348.5	462	152.5	29	ASR 300	348.5	642	152.5	29
150	6"	ADA 300	273	482	152.5	28,5	ASR 500	397	499	173	35,5	ASR 850	473	521	191.5	42	ASR 850	473	521	191.5	42
200	8"	ADA 500	304	539	173	46	ASR 850	473	561	191.5	57	ASR 1200	560	589	212.5	69,5	ASR 1200	560	589	212.5	69,5
250	10"	ADA 850	372	613	191.5	66	ASR 1200	560	641	212.5	83,5	ASR 1750	601	672	242.5	95	ASR 1750	601	672	242.5	95
300	12"	ADA 1200	439	683	212.5	91	ASR 1750	601	714	242.5	111	ASR 1750	601	714	242.5	111	ASR 2100	702	747	276.5	133
350	14"	ADA 1750	461	741	242.5	118,5	ASR 2100	702	774	276.5	154	ASR 2100	702	774	276.5	154	ASR 2500	738	844	356	186
400	16"	ADA 2100	510	789	276.5	195	ASR 2500	738	859	356	245	ASR 2500	738	859	356	245	ASR 2500	738	859	356	245
450	18"	ADA 2500	518	889	356	238,5	ASR 2500	738	889	356	269	ASR 2500	738	889	356	269	ASR 2500	738	889	356	269
500	20"	ADA 2500	518	953	356	294,5	ASR 2500	738	953	356	325	ASR 4000	940	1004	415	408	ASR 4000	940	1004	415	408
600	24"	ADA 2500	518	1013	356	439,5	ASR 4000	940	1064	415	553	ASR 4000	940	1064	415	553	ASR 4000	940	1064	415	553

Lug Colossus METAL

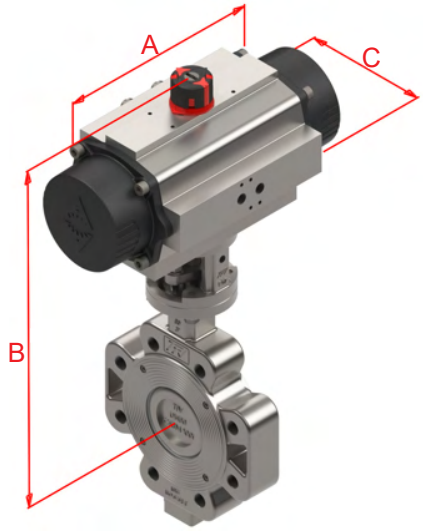
Valves & Technology

Válvula con accesorios / *Valve with accesories*

Actuador neumático doble efecto
Double acting actuator



Actuador neumático simple efecto
Spring Return Actuator



DN		ACT. NEUMÁTICO DOBLE EFECTO / DOUBLE ACTING PNEUMATIC ACT.																			
		PN10					*PN16*					*PN20 / ANSI 150*					*PN25*				
(mm)	In	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.
40	1 1/2"	ADA 40	158	306	91	6	ADA 40	158	306	91	6	ADA 40	158	306	91	6	ADA 40	158	306	91	6
50	2"	ADA 40	158	313	91	8	ADA 40	158	313	91	8	ADA 40	158	313	91	8	ADA 80	177	335	111	9
65	2 1/2"	ADA 40	158	325	91	9	ADA 40	158	325	91	9	ADA 80	177	347	111	10	ADA 80	177	347	111	10
80	3"	ADA 80	177	355	111	12	ADA 80	177	355	111	12	ADA 130	196	365	122	13	ADA 130	196	365	122	13
100	4"	ADA 130	196	386	122	18	ADA 130	196	386	122	18	ADA 130	196	386	122	18	ADA 130	196	386	122	18
125	5"	ADA 200	225	445	135.5	23,5	ADA 200	225	445	135.5	23,5	ADA 300	273	462	152.5	26,5	ADA 500	304	479	173	29
150	6"	ADA 500	304	499	173	31	ADA 500	304	499	173	31	ADA 850	372	521	191.5	37	ADA 1200	439	549	212.5	46
200	8"	ADA 500	304	539	173	46	ADA 850	372	561	191.5	52	ADA 1200	439	589	212.5	61	ADA 1200	439	589	212.5	61
250	10"	ADA 850	372	613	191.5	66	ADA 1200	439	641	212.5	75	ADA 1200	439	641	212.5	75	ADA 1750	461	672	242.5	82
300	12"	ADA 1750	461	714	242.5	98	ADA 2100	510	747	276.5	115	ADA 2100	510	747	276.5	115	ADA 2500	518	817	356	134,5
350	14"	ADA 1750	461	741	242.5	119	ADA 2100	510	774	276.5	136	ADA 2500	518	844	356	155,5	ADA 2500	518	844	356	155,5
400	16"	ADA 2100	510	789	276.5	195	ADA 2100	510	789	276.5	195	ADA 2500	518	859	356	214,5	ADA 2500	518	859	356	214,5
450	18"	ADA 2100	510	819	276.5	219	ADA 2100	510	819	276.5	219	ADA 2500	518	889	356	238,5	ADA 2500	518	889	356	238,5
500	20"	ADA 2100	510	883	276.5	275	ADA 2500	518	953	356	294,5	ADA 2500	518	953	356	294,5	ADA 4000	630	1004	415	354,5
600	24"	ADA 2500	518	1013	356	439,5	ADA 2500	518	1013	356	439,5	ADA 4000	630	1064	415	499,5	-	-	-	-	-

DN		ACT. NEUMÁTICO SIMPLE EFECTO / SPRING RETURN PNEUMATIC ACR.																			
40	1 1/2"	ASR 80	217	328	111	7,5	ASR 80	217	328	111	7,5	ASR 80	217	328	111	7,5	ASR 80	217	328	111	7,5
50	2"	ASR 80	217	335	111	9,5	ASR 80	217	335	111	9,5	ASR 80	217	335	111	9,5	ASR 130	258	345	122	11
65	2 1/2"	ASR 80	217	347	111	10,5	ASR 130	258	357	122	12	ASR 130	258	357	122	12	ASR 200	299	375	135.5	14,5
80	3"	ASR 130	258	365	122	14	ASR 200	299	383	135.5	16,5	ASR 200	299	383	135.5	16,5	ASR 300	348.5	400	152.5	20
100	4"	ASR 200	299	404	135.5	21,5	ASR 200	299	404	135.5	21,5	ASR 200	299	404	135.5	21,5	ASR 300	348.5	421	152.5	25
125	5"	ASR 300	348.5	462	152.5	29	ASR 500	397	479	173	33,5	ASR 850	473	501	191.5	40	ASR 1200	560	529	212.5	52,5
150	6"	ASR 850	473	521	191.5	42	ASR 850	473	521	191.5	42	ASR 1200	560	549	212.5	54,5	ASR 1750	601	580	242.5	66
200	8"	ASR 1200	560	589	212.5	69,5	ASR 1750	601	620	242.5	81	ASR 1750	601	620	242.5	81	ASR 2100	702	653	276.5	103
250	10"	ASR 1750	601	672	242.5	95	ASR 1750	601	672	242.5	95	ASR 2100	702	705	276.5	117	ASR 2500	738	775	356	149
300	12"	ASR 2100	702	747	276.5	133	ASR 2500	738	817	356	165	ASR 4000	940	868	415	248	ASR 4000	940	868	415	248
350	14"	ASR 2100	702	774	276.5	154	ASR 4000	940	895	415	269	ASR 4000	940	895	415	269	ASR 4000	940	895	415	269
400	16"	ASR 4000	940	910	415	328	ASR 4000	940	910	415	328	ASR 4000	940	910	415	328	ASR 4000	940	910	415	328
450	18"	ASR 4000	940	940	415	352	ASR 4000	940	940	415	352	ASR 4000	940	940	415	352	ASR 4000	940	910	415	352
500	20"	ASR 4000	940	1004	415	408	ASR 4000	940	1004	415	408	-	-	-	-	-	-	-	-	-	-
600	24"	ASR 4000	940	1064	415	553	ASR 4000	940	1064	415	553	-	-	-	-	-	-	-	-	-	-

Doble Brida Colossus

Dimensiones válvulas / *Valve dimensions*

FIG. 1 DN80-400

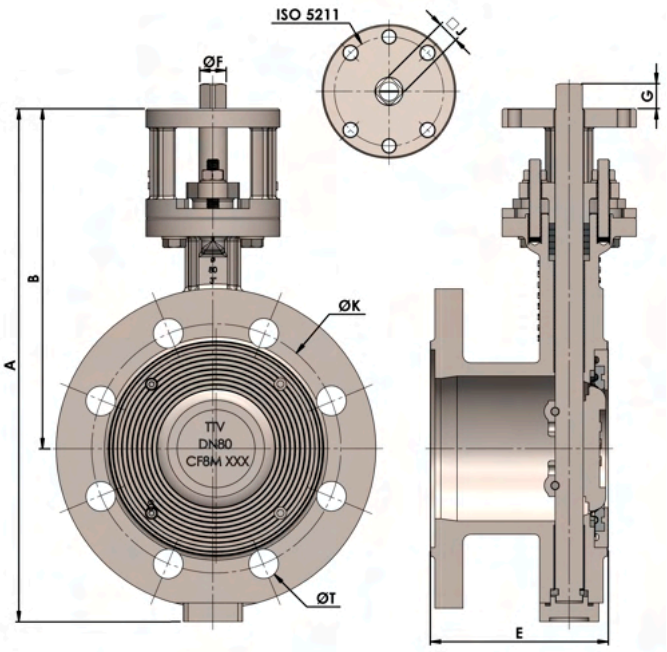
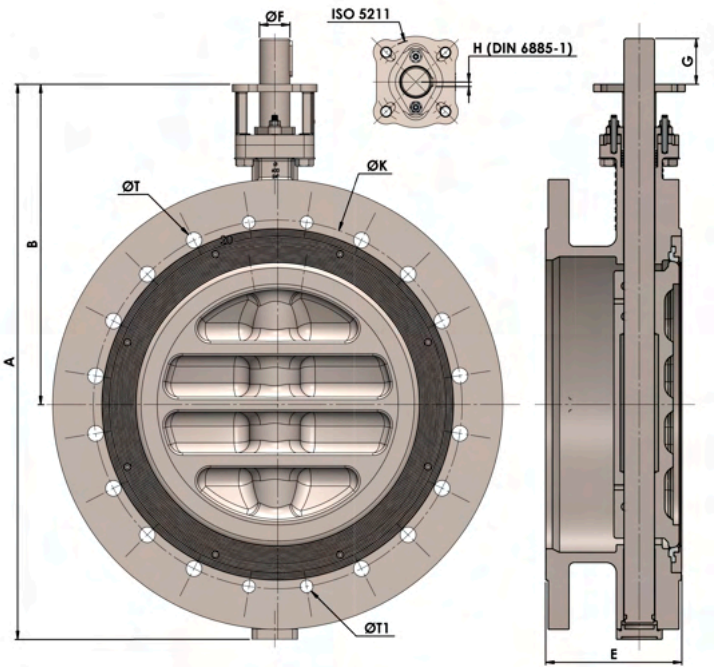


FIG. 2 DN450-600



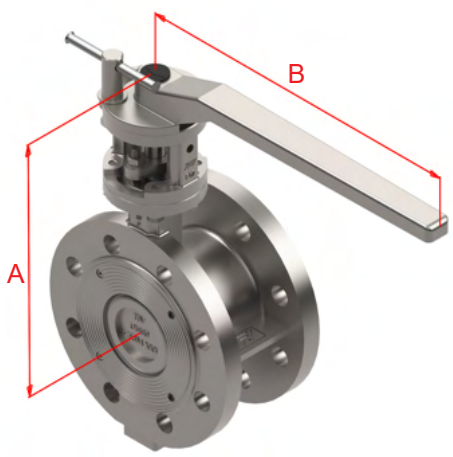
Dimensiones válvulas / *Valves dimensions*										PN10		PN16		PN25		ANSI150	
DN		A	B	E	F	G	J	ISO 5211	Peso *Weight* (Kg)	K	Taladros *Holes*	K	Taladros *Holes*	K	Taladros *Holes*	K	Taladros *Holes*
mm	In										Nº×T		Nº×T		Nº×T		Nº×T
FIG. 1 DN80-400																	
80	3"	329	218	114	17	15	14	F05/07	13	160	8×M16	160	8×M16	160	8×M16	152,4	4×5/8"
100	4"	365	239	127	17	18	14	F05/07	17	180	8×M16	180	8×M16	190	8×M20	190,5	8×5/8"
125	5"	430	280	140	21	22	17*	F07/10/12	27	210	8×M16	210	8×M16	220	8×M24	215,9	8×3/4"
150	6"	468	300	140	21	24	17*	F07/10/12	33	240	8×M20	240	8×M20	250	8×M24	241,3	8×3/4"
200	8"	540	345	152	26,5	32	22*	F10/12/14	53	295	8×M20	295	12×M20	310	12×M24	298,5	8×3/4"
250	10"	629	392	165	26,5	39	22*	F12/14/16	83	350	12×M20	355	12×M24	370	12×M27	362	12×7/8"
300	12"	712	434	178	33	50	27*	F12/14/16	122,5	400	12×M20	410	12×M24	430	16×M27	431,8	12×7/8"
350	14"	767	461	190	36	50	27*	F12/14/16	144	460	16×M20	470	16×M24	490	16×M30	476,3	12×1"
400	16"	810	476	216	50	80	-	F12/14/16	199,5	515	16×M24	525	16×M27	550	16×M33	539,8	16×1"
FIG. 2 DN450-600																	
450	18"	861	506	222	50	80	-	F14/16	243	565	20×M24	585	20×M27	600	20×M33	577,9	16×1 1/8"
500	20"	950	570	229	60	80	-	F14/16	296	620	20×M24	650	20×M30	660	20×M33	635	20×1 1/8"
600	24"	1090	630	267	60	90	-	F14/16	462,5	725	20×M27	770	20×M33	770	20×M36	749,3	20×1 1/4"

• Las dimensiones son nominales +/- 1 mm / *Dimensions are nominal +/- 1 mm*
• Sujeto a cambios sin previo aviso / *Subjet to change without notice*

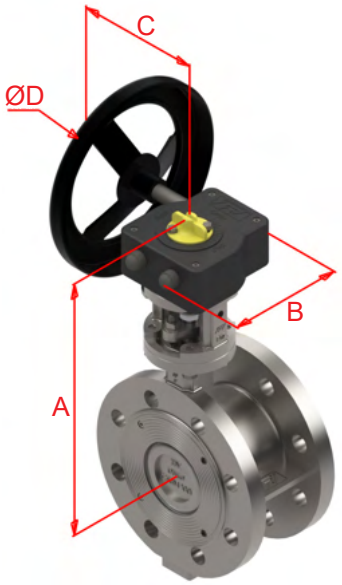
Doble Brida Colossus

Válvula con accesorios / *Valve with accesories*

Mando palanca
Lever-operated



Reductor
Worm-gear

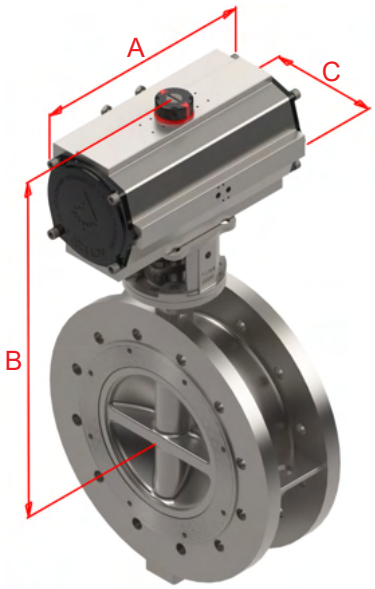


Diámetro nominal		Mando palanca			Reductor					
Nominal size		*Lever-operated*			*Worm-gear*					
(mm)	In	A	B	Peso *Weight*	Modelo *Model*	A	B	C	ØD	Peso *Weight*
80	3"	267	205	13,4	AM1-TTV	246	100	120	200	14,8
100	4"	288	330	17,5	AM1-TTV	267	100	120	200	18,8
125	5"	329	330	27,5	AM2-TTV	320	142	223	300	31
150	6"	349	330	33,5	AM2-TTV	340	142	223	300	37
200	8"	-	-	-	AM2-TTV	380	142	223	300	57
250	10"	-	-	-	AM3-TTV	443	185	322	400	92,5
300	12"	-	-	-	AM3-TTV	485	185	322	400	131,5
350	14"	-	-	-	AM3-TTV	512	185	322	400	153,5
400	16"	-	-	-	ARC10	518	200	381	600	218,3
450	18"	-	-	-	ARC11	554	220	402	600	269,8
500	20"	-	-	-	ARC12	625	285	447	700	334,3
600	24"	-	-	-	ARC12	685	285	447	700	500,8

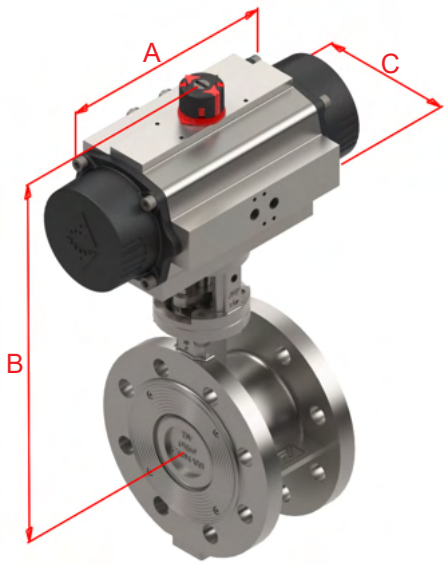
Doble Brida Colossus PTFE / R-PTFE

Válvula con accesorios / *Valve with accesories*

Actuador neumático doble efecto
Double acting actuator



Actuador neumático simple efecto
Spring Return Actuator

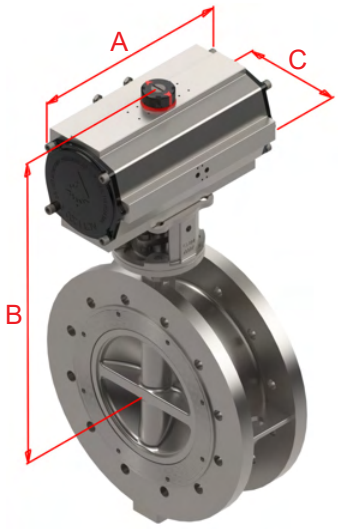


DN		ACT. NEUMÁTICO DOBLE EFECTO *DOUBLE ACTING PNEUMATIC ACT.*					ACT. NEUMÁTICO SIMPLE EFECTO / SPRING RETURN PNEUMATIC ACR.													
		PN10 / 16 / 20 / 25 / ANSI 150					*PN10 / 16*					*PN20 / ANSI 150*					*PN25*				
(mm)	In	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.
80	3"	ADA 80	177	355	111	16	ASR 200	299	383	135.5	20,5	ASR 200	299	383	135.5	20,5	ASR 200	299	383	135.5	20,5
100	4"	ADA 130	196	386	122	21	ASR 200	299	404	135.5	24,5	ASR 300	348.5	421	152.5	28	ASR 300	348.5	421	152.5	28
125	5"	ADA 200	225	445	135.5	33	ASR 300	348.5	462	152.5	38	ASR 300	348.5	462	152.5	38	ASR 300	348.5	642	152.5	38
150	6"	ADA 300	273	482	152.5	41,5	ASR 500	397	499	173	48,5	ASR 850	473	521	191.5	55,5	ASR 850	473	521	191.5	55,5
200	8"	ADA 500	304	539	173	64,5	ASR 850	473	561	191.5	75,5	ASR 1200	560	589	212.5	87,5	ASR 1200	560	589	212.5	87,5
250	10"	ADA 850	372	613	191.5	100	ASR 1200	560	641	212.5	117,5	ASR 1750	601	672	242.5	129	ASR 1750	601	672	242.5	129
300	12"	ADA 1200	439	683	212.5	148,5	ASR 1750	601	714	242.5	168,5	ASR 1750	601	714	242.5	168,5	ASR 2100	702	747	276.5	190,5
350	14"	ADA 1750	461	741	242.5	176,5	ASR 2100	702	774	276.5	212	ASR 2100	702	774	276.5	212	ASR 2500	738	844	356	244
400	16"	ADA 2100	510	789	276.5	249,5	ASR 2500	738	859	356	299,5	ASR 2500	738	859	356	299,5	ASR 2500	738	859	356	299,5
450	18"	ADA 2500	518	889	356	313	ASR 2500	738	889	356	343	ASR 2500	738	889	356	343	ASR 2500	738	889	356	343
500	20"	ADA 2500	518	953	356	366	ASR 2500	738	953	356	396	ASR 4000	940	1004	415	479	ASR 4000	940	1004	415	479
600	24"	ADA 2500	518	1013	356	532,5	ASR 4000	940	1064	415	645,5	ASR 4000	940	1064	415	645,5	ASR 4000	940	1064	415	645,5

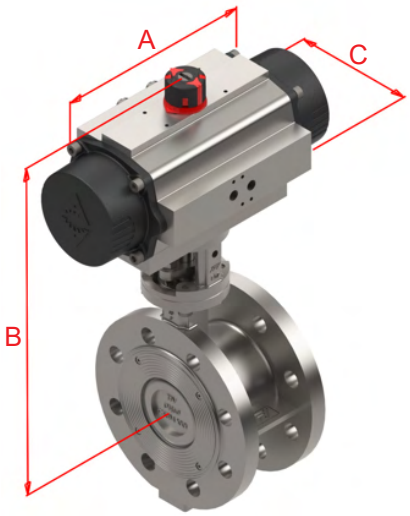
Doble Brida Colossus METAL

Válvula con accesorios / *Valve with accesories*

Actuador neumático doble efecto
Double acting actuator



Actuador neumático simple efecto
Spring Return Actuator



DN		ACT. NEUMÁTICO DOBLE EFECTO / DOUBLE ACTING PNEUMATIC ACT.																			
		PN10					*PN16*					*PN20 / ANSI150*					*PN25*				
(mm)	In	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.	Modelo *Model*	A	B	C	Kg.
80	3"	ADA 80	177	355	111	16	ADA 80	177	355	111	16	ADA 130	196	365	122	17	ADA 130	196	365	122	17
100	4"	ADA 130	196	386	122	21	ADA 130	196	386	122	21	ADA 130	196	386	122	21	ADA 130	196	386	122	21
125	5"	ADA 200	225	445	135.5	33	ADA 200	225	445	135.5	33	ADA 300	273	462	152.5	35,5	ADA 500	304	479	173	38,5
150	6"	ADA 500	304	499	173	44,5	ADA 500	304	499	173	44,5	ADA 850	372	521	191.5	50	ADA 1200	439	549	212.5	59
200	8"	ADA 500	304	539	173	64,5	ADA 850	372	561	191.5	70	ADA 1200	439	589	212.5	79	ADA 1200	439	589	212.5	79
250	10"	ADA 850	372	613	191.5	100	ADA 1200	439	641	212.5	109	ADA 1200	439	641	212.5	109	ADA 1750	461	672	242.5	116
300	12"	ADA 1750	461	714	242.5	155,5	ADA 2100	510	747	276.5	172,5	ADA 2100	510	747	276.5	172,5	ADA 2500	518	817	356	192
350	14"	ADA 1750	461	741	242.5	177	ADA 2100	510	774	276.5	194	ADA 2500	518	844	356	214	ADA 2500	518	844	356	214
400	16"	ADA 2100	510	789	276.5	249,5	ADA 2100	510	789	276.5	249,5	ADA 2500	518	859	356	269	ADA 2500	518	859	356	269
450	18"	ADA 2100	510	819	276.5	293	ADA 2100	510	819	276.5	293	ADA 2500	518	889	356	313	ADA 2500	518	889	356	313
500	20"	ADA 2100	510	883	276.5	346	ADA 2500	518	953	356	366	ADA 2500	518	953	356	366	ADA 4000	630	1004	415	366
600	24"	ADA 2500	518	1013	356	532	ADA 2500	518	1013	356	532	ADA 4000	630	1064	415	592	-	-	-	-	-

DN		ACT. NEUMÁTICO SIMPLE EFECTO / SPRING RETURN PNEUMATIC ACR.																			
80	3"	ASR 130	258	365	122	18	ASR 200	299	383	135.5	20,5	ASR 200	299	383	135.5	20,5	ASR 300	348.5	400	152.5	20,5
100	4"	ASR 200	299	404	135.5	24,5	ASR 200	299	404	135.5	24,5	ASR 200	299	404	135.5	24,5	ASR 300	348.5	421	152.5	24,5
125	5"	ASR 300	348.5	462	152.5	29	ASR 500	397	479	173	42,5	ASR 850	473	501	191.5	49,5	ASR 1200	560	529	212.5	49,5
150	6"	ASR 850	473	521	191.5	55,5	ASR 850	473	521	191.5	55,5	ASR 1200	560	549	212.5	67,5	ASR 1750	601	580	242.5	67,5
200	8"	ASR 1200	560	589	212.5	87,5	ASR 1750	601	620	242.5	99	ASR 1750	601	620	242.5	99	ASR 2100	702	653	276.5	99
250	10"	ASR 1750	601	672	242.5	129	ASR 1750	601	672	242.5	129	ASR 2100	702	705	276.5	151	ASR 2500	738	775	356	151
300	12"	ASR 2100	702	747	276.5	190,5	ASR 2500	738	817	356	222,5	ASR 4000	940	868	415	305,5	ASR 4000	940	868	415	305,5
350	14"	ASR 2100	702	774	276.5	212	ASR 4000	940	895	415	327	ASR 4000	940	895	415	327	ASR 4000	940	895	415	327
400	16"	ASR 4000	940	910	415	382,5	ASR 4000	940	910	415	382,5	ASR 4000	940	910	415	382,5	ASR 4000	940	910	415	382,5
450	18"	ASR 4000	940	940	415	426	ASR 4000	940	940	415	426	ASR 4000	940	940	415	426	ASR 4000	940	910	415	426
500	20"	ASR 4000	940	1004	415	479	ASR 4000	940	1004	415	479	-	-	-	-	-	-	-	-	-	-
600	24"	ASR 4000	940	1064	415	645,5	ASR 4000	940	1064	415	645,5	-	-	-	-	-	-	-	-	-	-