

Uniwat®



Concentric Butterfly Valves

www.comeval.es



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General Design Considerations



A butterfly valve is a type of flow control device, typically used to regulate a fluid flowing through a section of pipe. A flat circular plate (disc) is positioned in the centre of the pipe. The plate has a rod (shaft) through it connected to an actuator on the outside of the valve. Rotating the actuator turns the plate either parallel or perpendicular to the flow. Unlike a ball valve, the plate is always present within the flow, therefore a pressure drop is always induced in the flow regardless of valve position.

A butterfly valve is from a family of valves called quarter turn valves. The “butterfly” is a metal disc mounted on a rod. When the valve is closed, the disc is turned so that it completely blocks off the passageway. When the valve is fully open, the disc is rotated a quarter turn so that it allows unrestricted passage. The valve may also be opened incrementally to regulate flow thanks to the gradual interlocking notch.

Butterfly valves are of simple design, of light weight and volume and very effective on isolating lines for its quick and safe operation. Most of butterfly valves design are flangeless for installation between counter flanges what saves space, costs and maintenance.

There are two kind of flangeless butterfly valves:

Wafer Style Concentric Butterfly Valves: Wafer style is the more common one and is the least expensive one. The Wafer Style Concentric Butterfly valve is just about the standard. It is so common that no one even bothers to use the word “wafer” when ordering a butterfly valve. They take it for granted that if they order a butterfly valve, they will get a wafer style one. Wafer butterfly valves are installed between two flanges using bolts or studs and nuts. This type of installation, of course, makes it impossible to disconnect just one side of the piping system from the valve. That is where the lug style valve comes in.

Lug Style Butterfly Valves: Lug style valves are provided with tapered holes to fix threaded bolts in. This allows them to be installed into a system using two sets of bolts and no nuts. The valve is installed between two flanges using a separate set of bolts for each flange. This set-up permits either side of the piping system to be disconnected without distributing the other side.

Lug Style Butterfly Valves are used in dead end service and generally have a reduced pressure rating.

Valves can also be of dual flanged design; provided with integral flanges that are ready to be installed between flanges of the same standard. These are more bulky valves and usually required for large sizes and other styles of performance by the position of the shaft. (see next paragraph).

Other kind of valves by its nature of shaft design are as follows:

Concentric Design: This is the most common and simple design. The valve shaft is concentric to the disc. It is normally a resilient seated valve. Rotating the handle turns the plate either parallel or perpendicular to the flow of water, shutting off the flow

Double Eccentric Design: This design features a slight offset in the way the disc is positioned, which increases the valve's sealing ability and decreases its tendency to wear. It is normally used for throttling functions, larger sizes and / or metal seated valves.

Triple Offset Design: This design is the one offering the highest degree of performance. The shaft is totally off set from the central axis thus increasing the ability of the valve disc to close tightly at even high pressure. These valves are usually metal seated thus being used for high temperature too. These valves are usually operated by worm gear to achieve a slow closing.

Codification

Butterfly valve with body material JL1040 (GG25)

V F 7 5 0 P G E 0 0 0 0 5 0

VF : UNIWAT® butterfly valve identification

BUTTERFLY TYPE

750 Lug type with back seat

ACTUATION DEVICE

P With lever
R With worm gear
B Bare shaft
E Electric actuator

DISC

G Ductile iron JS1030 (GGG40)
I St. Steel CF8M (AISI 316)
B AL-BZ
F Coated FEP
P Coated PFA
U St. Steel 904L

SEAT

E EPDM
N NBR
V Viton
S Silicon
F FEP
P PFA
H Hypalon

SPECIAL CONNECTION

00 No special connection
16 PN16 for valves >DN300

Only connection, no design

VALVE SIZE

050 DN50
300 DN300

Butterfly valve with other body material

V F 7 5 0 P G G N 0 0 0 5 0

VF : UNIWAT® butterfly valve identification

BUTTERFLY TYPE

750 Lug type with back seat

ACTUATION DEVICE

P With lever
R With worm gear
B Bare shaft
E Electric actuator

BODY

G Ductile iron JS1030 (GGG40)
A Carbon Steel WCB
I St. Steel CF8M (AISI 316)
B AL-BZ
U St. Steel 904L

DISC

G Ductile iron JS1030 (GGG40)
I St. Steel CF8M (AISI 316)
B AL-BZ
F Coated FEP
P Coated PFA
U St. Steel 904L

SEAT

E EPDM
N NBR
V Viton
S Silicon
F FEP
P PFA
H Hypalon

SPECIAL CONNECTION AND DESIGN

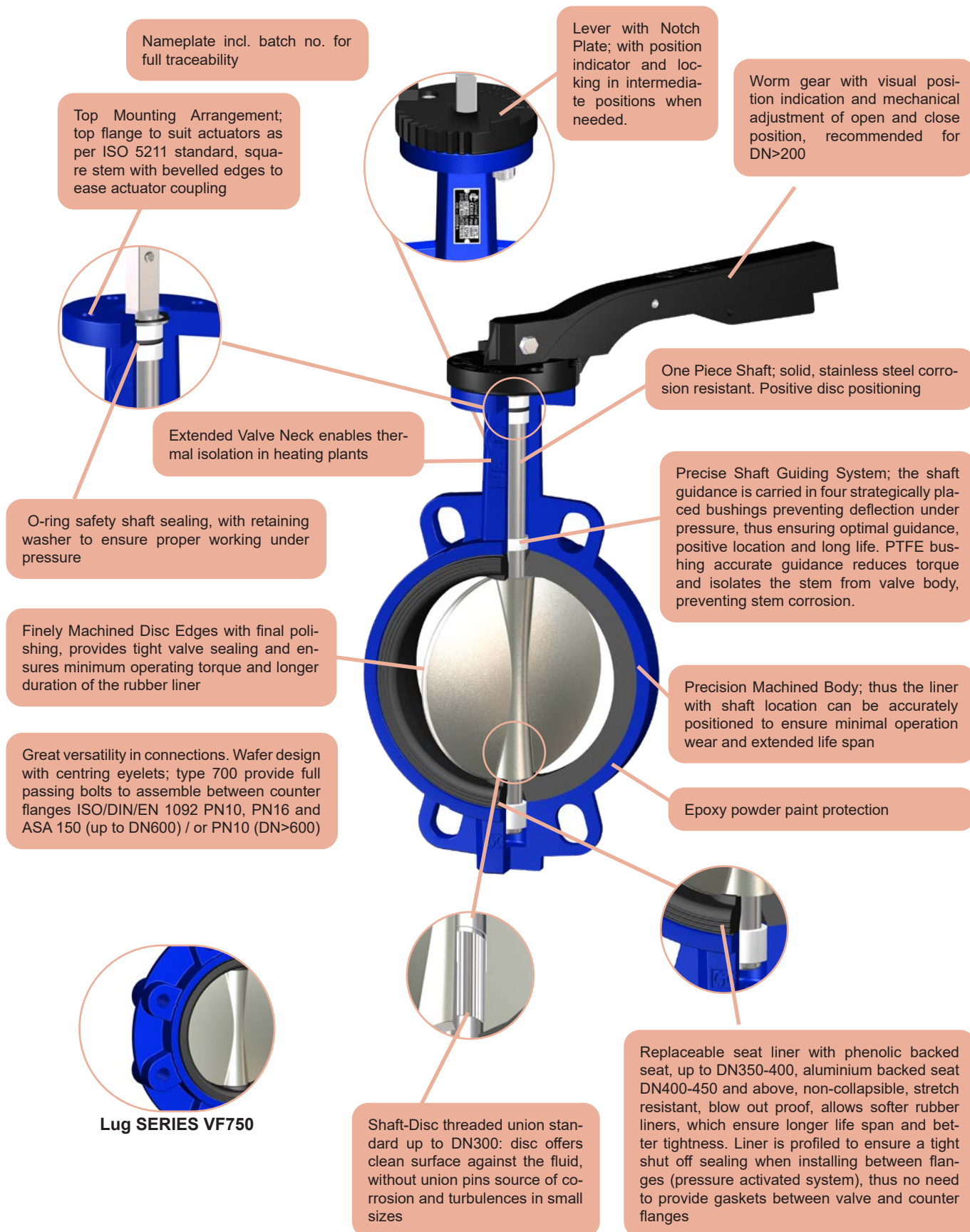
00 No special connection
16 PN16 for valves >DN300

VALVE SIZE

050 DN50
300 DN300

Design Attributes

Concentric Butterfly Valves are quarter turn rotary valves, bidirectional, with rubber or fluoropolymer seat, for stopping or regulating the flow of the service fluid when necessary. A metal disc is positioned in the centre of the valve. The plate has a rod (stem) through it connected to an actuator device (handwheel, gear, etc.) on the outside of the valve. The valve closes by turning the disc clockwise and is open when the lever is parallel to the pipe. Valves are provided with epoxy paint against environmental aggression. They are of simple design, light weight and volume and offer a quick operation with full seat tightness, being widely used in many applications with significant savings in space and investment costs for installation.



SERIES VF750

Main Features

Valve design: EN 593, EN 12516 & DIN 3840.

Nominal Pressure: PN16 (DN25-DN300)/ PN10* (DN350-1200). For PTFE seat PN10 (DN40-600)

* Option PN16 (DN350-1200)

Face to face length: EN 558 S20 (DIN 3202 K1) SERIES VF700/750/7U0

Valve end connections:

-VF750 Lug type to be installed between welding neck flanges EN 1092-1/2 type 11/B

PN16 (DN25-300); PN10 (DN350-600), option PN16 (DN350-600)

Top flange: ISO 5211

Marking: EN 19

Pressure Tests: EN 12266-1

Seat leakage rate: Rate A (full seat tightness in both directions)

Outside epoxy coating protection blue color similar to RAL5002. Min. average thickness 150 microns

Product compliant with Directive 2014/68/EU on Pressure Equipment (PED) and Machinery Directive 2006/42/EC

WRAS Approval for VF750 DN25-DN300

Main Duties / Limits of use

Liquids compatible with materials of construction, acc. to Directive 2014/68/EU, Annex II table 8 (liquids of group 1*) & table 9 (liquids of group 2*) up to category I

Low pressure steam & neutral gases of group 2*, acc. to Directive 2014/68/EU, Annex II table 7 up to category I

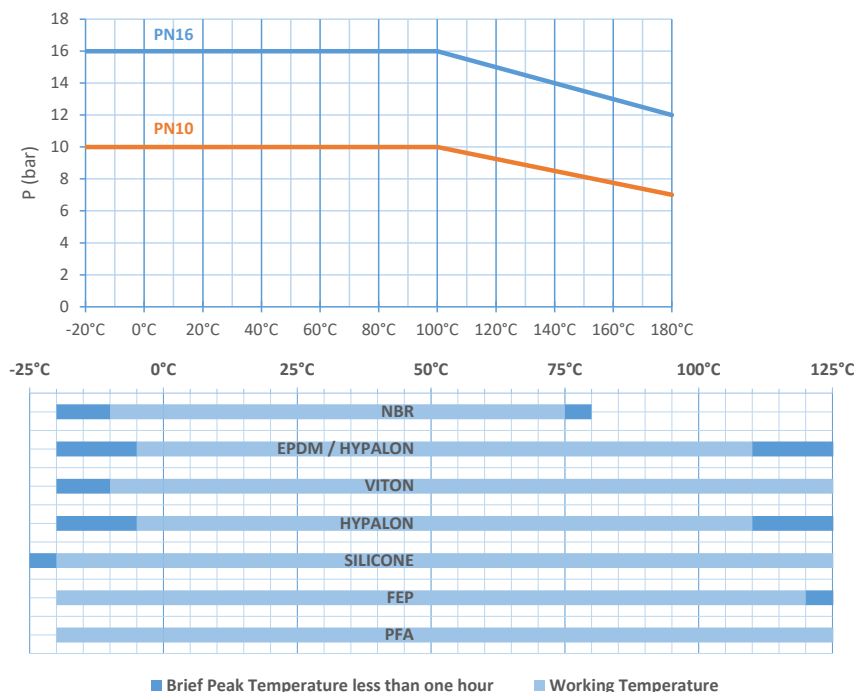
Table 7: PS 16 bar DN25-200 (Art.4-Parr.3 DN25-50)
PS 13 bar DN250
PS 10 bar DN300-350
PS 6 bar DN400-500
PS 2,5 bar DN600-1200

Table 8: PS 16 bar DN25-125 (Art.4-Parr.3)
PS 13 bar DN150
PS 10 bar DN200-1200 (Art.4-Parr.3 DN200)
Table 9: PS 16 bar DN25-300 (Art.4-Parr.3)
- Option DN350-1200
PS 10 bar DN350-1200 (Art.4-Parr.3)

Questions referring to chemical resistance, please consult us

Observe also pressure/temperature limits on diagrams under

*Classification of fluids (group 1 or 2) acc. to Directive 2014/68/EU, Article 13



We recommend not to exceed maximum velocity as follows:
PN10: 3 m/s
PN16: 4 m/s

TSmax: 80°C for drinking water

Temperature ranges given just for reference.

Pressure-temperature rating, material compatibility and other parameters also to be considered for rubber selection.

Please consult our Technical Department for a particular application.

Options

Compliance with EN 1074-1/2, higher service pressure ratings and temperatures, other connections, other designs and approvals, limit switches, different actuation. Please consult us

SERIES VF750

Flow Coefficients Kv Values (m³/h)

DN	Opening Angle of the Valve								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
25	-	-	1,5	5	8,3	14	22	33	36
32	-	0,8	1,7	5,3	9,5	16	25	37	41
40	-	1,5	3,5	8	14	23	37	55	61
50	-	2,5	7	14	24	40	64	95	105
65	-	5	11	23	40	67	107	159	176
80	-	9	20	35	61	101	161	240	265
100	-	16	38	78	137	226	360	538	594
125	0,5	26	69	129	219	361	576	860	950
150	0,8	44	105	205	373	617	983	1468	1622
200	1,3	82	205	387	680	1124	1792	2676	2957
250	2,1	138	345	669	1084	1791	2855	4262	4711
300	3,7	210	534	1028	1639	2707	4318	6449	7126
350	5,5	305	750	1326	2347	3878	6184	9236	10205
400	7,4	388	935	1813	3208	5301	8454	12625	13950
450	9,7	550	1212	2370	4193	6929	11049	16500	18232
500	13	658	1595	2981	5275	8716	13900	20758	22937
600	20	962	2246	4431	7919	13083	20864	31158	34429
700	55	1233	2725	5105	9022	14906	23770	35499	39225
800	135	1719	3394	6367	10338	17081	27239	40905	44950
900	180	2475	4731	8631	13691	22620	36072	54165	59525
1000	250	3342	6443	11752	18642	30800	49116	73755	81050
1200	320	4715	8643	15155	24198	39980	63757	95741	105210

A valve flow coefficient represents the standard flow rate which flows through the valve at a given opening, referred to pre-established conditions:

* Kv value is the volume of water at 20°C, in cubic meters per hour (m³/h), that will flow through the valve at a static pressure drop of 1 bar across the valve.

* Cv value is the volume of water at 60°F, in gallons per minute (gpm), that will flow through the valve at a static pressure drop of 1 psi across the valve.

Conversion from Kv to Cv can be roughly calculated by means of the following expression:

$$Cv = Kv \times 1,17$$

Flow rate through the valve with other liquids can be calculated with the following expressions (for gases please consult us):

$$Kv = q (SG / dp)^{1/2} \text{ where}$$

q = water flow (m³/h)

SG = specific gravity (1 for water)

dp = pressure drop (bar)

$$Cv = q (SG / dp)^{1/2} \text{ where}$$

q = water flow (US gallons per minute)

SG = specific gravity (1 for water)

dp = pressure drop (psi)

It is common practice to size the valves on the basis of pipe DN for on off application. Nevertheless, Butterfly Valves used for control purpose should be calculated on the basis of operating conditions.

First step is to calculate the Kv values for the different working conditions and then choose the DN with such Kv values in the region of 20° to 70° valve opening angle.

COMEVAL Technical Department is at your disposal to help you sizing your system.

Valve Torques (Nm)

DN	Elastomeric seat		
	PN6	PN10	PN16
25	8*		10
32	8*		10
40	10*		12
50	14*		16
65	22*		26
80	29*		33
100	43*		53
125	66*		81
150	94*		119
200	161*		194
250	256*		308
300	283*	410*	595
350	340*	475	969*
400	500*	746	1307*
450	780*	1112	1787*
500	1120*	1356	2288*
600	2120*	2468	3711*
700	3400*	4908	5350*
800	-	6462	-
900	-	7886	-
1000	-	13389	-
1200	-	18833	-

*Special construction

Remarks for Actuator Sizing:

The torque values given are for water or other non-viscous lubricating liquids at ambient temperature.

Recommended safety factor to be applied:

30-40% for double acting pneumatic actuators

30-50% for single acting pneumatic actuators and electric actuators

There are several factors that can increase above given values and should be taken into account for actuators sizing:

-For gases and dry medium (non lubricating), multiply above values by about 1,25-2 depending on application

-For viscous liquids increase above values depending on the liquid properties

-For service conditions such as likelihood of seat swelling, or low and high temperature seat hardening, an additional safety factor should be considered.

There are three torques to be considered when selecting the proper actuator for a butterfly valve:

1) Seating Torque: The torque to displace a resilient seat and effect shutoff

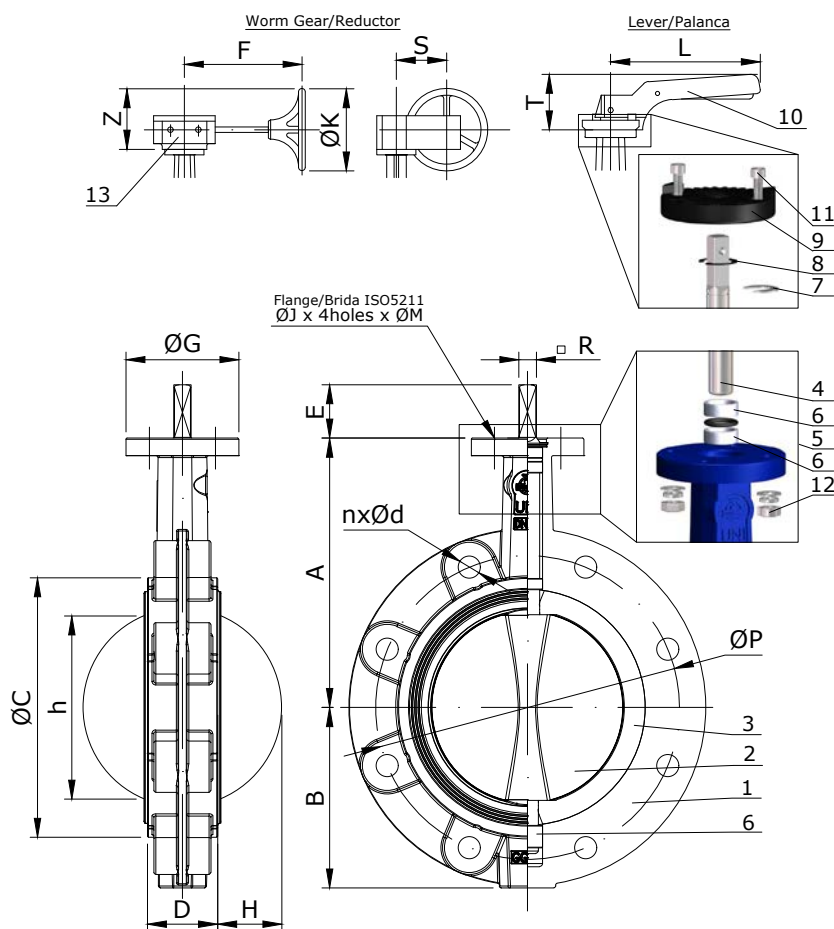
2) Bearing Torque: The torque required to overcome friction forces on the valve shaft bearing surfaces during valve travel angle (about 30% of seating torque)

3) Dynamic Torque: Due to fluid forces which tend to close the valve when the valve is partially open. This torque is due to the velocity of the fluid created by a differential pressure across the valve. Systems should be projected to avoid high velocities across the valve

Above given values are inclusive of the 3 torques if max. recommended velocities are not exceeded, the actuator selected must provide the calculated torque over its total opening and closing travel angle.

SERIES VF750

Main Parts and Materials



NO.	PART	MATERIAL
1	BODY*	Cast iron EN-JL1040 (GG25) Ductile iron EN-JS1030 (GGG40) St. steel CF8M / Steel WCB
2	DISC	Ductile iron EN-JS1030 (GGG40) Ni Plated / St. steel CF8M Al-Bz / St. steel 904L
3	LINER	NBR (VF750_N_) EPDM (VF750_E_) Viton (VF750_V_) Silicon (VF750_S_) HYPALON (VF750_H_)
4	STEM	St. steel AISI 420 (DN25-300) St. steel AISI 431 (DN350-600)
5	O-RING	NBR / EPDM
6	BUSHING	PTFE
7	WASHER	Steel
8	CIRCLIP	Steel
9	NOTCH PLATE	Aluminium
10	HAND LEVER	Aluminium / Ductile iron
11	BOLTS	Steel
12	NUTS	Steel
13	WORM GEAR	Ductile iron

* Body in cast iron JL1040 not suitable for DN350-600 PN16 construction

Main Valve Parameters

	DN	25	32	40	50	65	80	100	125
	A	121	121	130	136,5	142	158	180	192
	B	53	57	61	77	87,5	95	107	121,5
	ØC	65	73	82	90	103	120	152	180
	D	33	33	33	43	46	46	52	56
	H	0	1,3	4,9	5	9,4	16,6	26,2	33,9
	h	0	13,6	27,3	31	45,6	64,3	90,4	110,4
	ISO 5211	F05	F05	F05	F05	F05	F05	F05	F07
	E	32	32	32	32	32	32	32	42
	□R	7x7	7x7	9x9	9x9	9x9	9x9	11x11	14x14
	ØG	65	65	65	65	65	65	65	90
	ØJ	50	50	50	50	50	50	50	70
	ØM	7	7	7	7	7	7	7	9
	ØP	85	100	110	125	145	160	180	210
PN10	nxØd	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16
PN16	ØP	85	100	110	125	145	160	180	210
PN16	nxØd	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16
	T	70	70	70	70	70	70	70	71
	L	195	195	195	195	195	195	195	278
	Approx. Weight	2,6	2,6	3	4	5	6	7	10
	F	156	156	156	156	156	156	156	156
	S	45	45	45	45	45	45	45	45
	Z	116	116	116	116	116	116	116	168
	ØK	150	150	150	150	150	150	150	250
	Approx. Weight	6,5	6,5	7	7,5	8,5	9,5	11	13,5

Dimensions in mm subject to manufacturing tolerance / Weights in kg

Information / restriction of technical rules need to be observed!
Installation, Operating and Maintenance Manual can be downloaded at www.comeval.es

The engineer, designing a system or a plant, is responsible for the selection of the correct valve
Product suitability must be verified, contact manufacturer for information

SERIES VF750

Main Valve Parameters

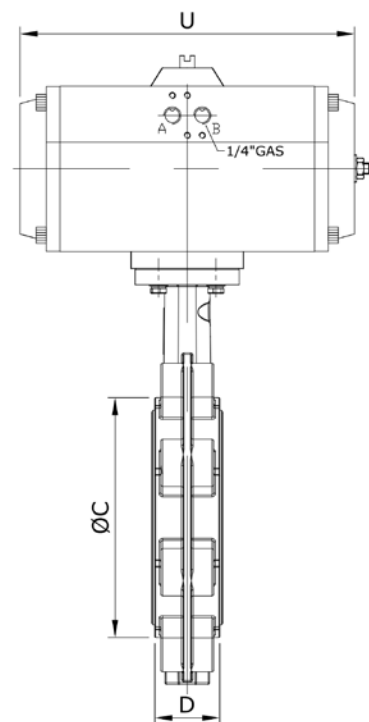
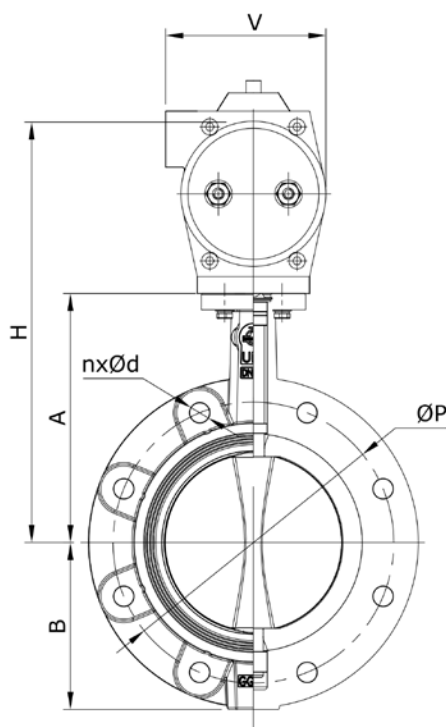
	DN	150	200	250	300	350	400	450	500	600
	A	215	242	280	310	337	357,3	422	482	563
	B	144	171	205	235	258,5	303,3	323	350	444,5
	ØC	207	260	315	370	418	470	525	570	697
	D	56	60	68	78	78	102	114	127	154
	H	49,7	71,2	91,25	111,8	127,8	143,9	163,4	182,4	219,4
	h	145	193,3	241,1	291,3	324,5	376,2	425,7	475,1	572,3
	ISO 5211	F07	F10	F12	F12	F12	F12	F16	F16	F16
	E	42	36	38	38	45	50	50	65	70
COUPLING DETAIL	□R	14x14	17x17	22x22	27x27	27x27	27x27	30x30	36x36	46x46
	ØG	90	125	150	150	150	150	210	210	300
	ØJ	70	102	125	125	125	125	165	165	165
	ØM	9	11	13	13	14	14	22	22	22
PN10	ØP	240	295	350	400	460	515	565	620	725
	nxØd	8xM20	8xM20	12xM20	12xM20	16xM20	16xM24	20xM24	20xM24	20xM27
PN16	ØP	240	295	355	410	470	525	585	650	770
	nxØd	8xM20	12xM20	12xM24	12xM24	16xM24	16xM27	20xM27	20xM30	20xM33
LEVER	T	71	40	44	44	-	-	-	-	-
	L	278	355	507	507	-	-	-	-	-
	Approx. Weight	12	20	21	42	-	-	-	-	-
WORM GEAR	F	156	241	223	223	223	270	270	339	339
	S	45	63	78	78	78	120	120	120	120
	Z	168	193	190	190	190	208	258	222	222
	ØK	250	300	300	300	300	400	400	300	300
	Approx. Weight	15,5	25	45	52	79,5	123	155	228,5	309

We do not recommend the use of valves with rubber liner and lever for DN300

Dimensions in mm subject to manufacturing tolerance / Weights in kg

SERIES VF750 DN25-600 with Pneumatic Actuator

Main Valve Parameters



DN	25	32	40	50	65	80
Design Pressure	16 bar	16 bar	16 bar	16 bar	16 bar	16 bar
Medium	Water	Air	Water	Air	Water	Air
A	121	121	130	137	142	158
B	53	57	61	77	87,55	95
ØC	65	73	82	90	103	120
D	33	33	33	43	46	46
Double acting	Actuator	T05	T05	T15	T15	T17
	H	192	192	201	223	239
	U	119	119	175	175	207
	V	67	67	81	81	81
Weight	3	3	4	5	6	7
Single acting	Actuator	T15	T15	T17	T20	T30
	H	202	202	211	218	235
	U	175	175	207	186	248
	V	81	81	81	96	114
Weight	4	4	5	5	4	9

DN	100	125	150	200	250
Design Pressure	16 bar	16 bar	16 bar	16 bar	16 bar
Medium	Water	Air	Water	Air	Water
A	180	192	215	242	280
B	107	121,5,5	144	171	205
ØC	152	180	207	260	315
D	52	56	56	60	68
Double acting	Actuator	T25	T30	T35	T40
	H	278	309	369	396
	U	248	241	261	305
	V	96	114	131	131
Weight	10	13	17	23	47
Single acting	Actuator	T30	T35	T40	T45
	H	297	334	346	383,5
	U	241	261	305	367
	V	114	131	131	145
Weight	11	11	15	14	21

Dimensions in mm subject to manufacturing tolerance / Weights in kg

Information / restriction of technical rules need to be observed!

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The engineer, designing a system or a plant, is responsible for the selection of the correct valve

Product suitability must be verified, contact manufacturer for information

SERIES VF750 DN25-600 with Pneumatic Actuator

Main Valve Parameters

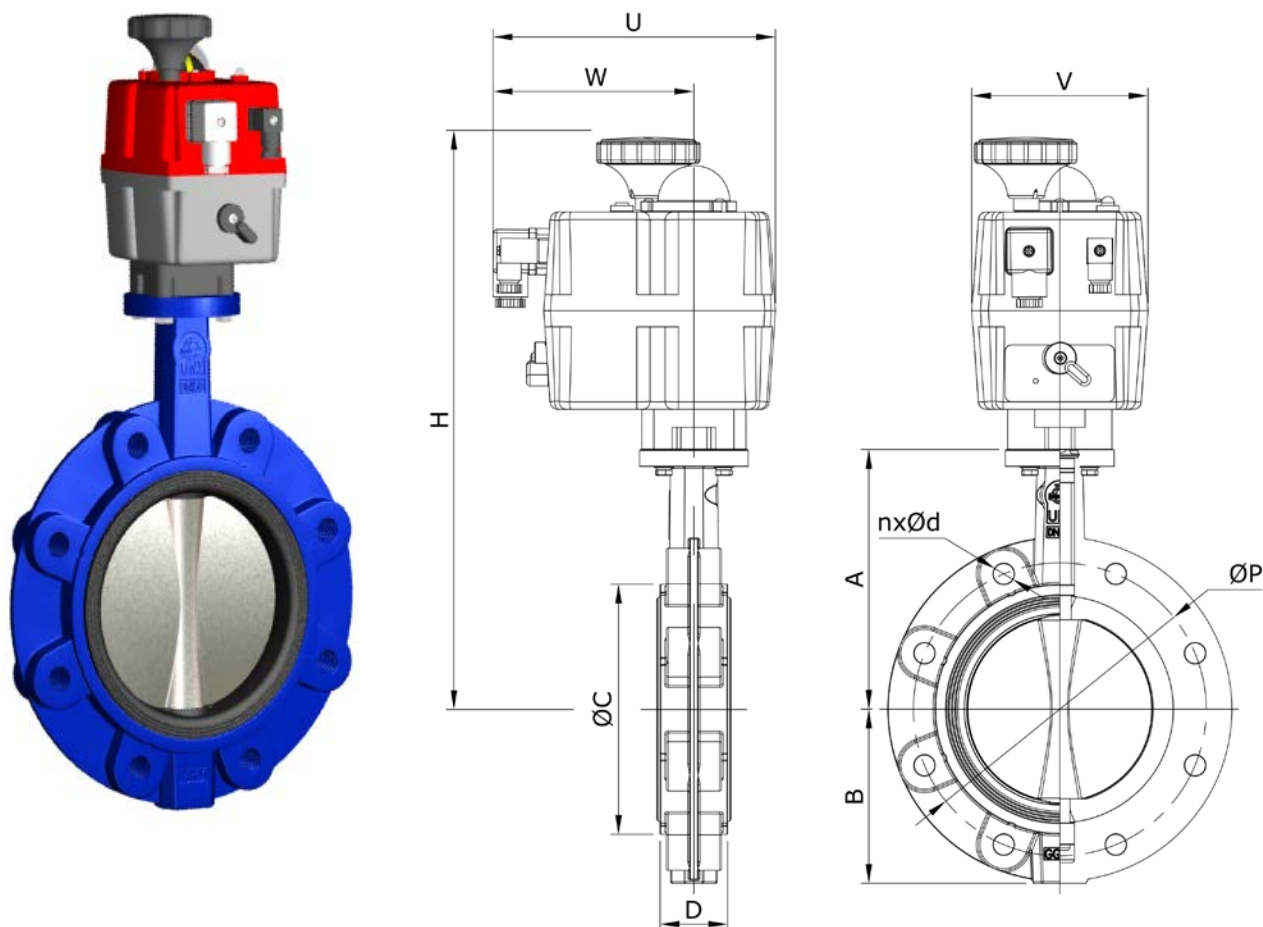
DN		300			350			400		
Design Pressure		6 bar	10 bar	16 bar	6 bar	10 bar	16 bar	6 bar	10 bar	16 bar
Medium		Water - Air			Water - Air			Water - Air		
A		310			334			361		
B		235			260			307		
ØC		370			418			470		
D		78			78			102		
Double acting	Actuator	T50		T55	T50	T55	T65	T55	T60	T70
	H	512		512	536	536	591	563	618	689
	U	380,5		428	380,5	428	525	428	467	636
	V	181		181	181	181	45,8	181	230	82,96
Weight		47		61	56	83	76	114	96	162
Single acting	Actuator	T60	T65	T70	T60	T65	T70	T70		-
	H	567	567	638	591	591	662	689		-
	U	467	525	636	467	525	636	636		-
	V	230	45,8	82,96	230	45,8	82,96	82,96		-
Weight		75	67	109	73	101	107	130		-

DN		450			500			600		
Design Pressure		6 bar	10 bar	16 bar	6 bar	10 bar	16 bar	6 bar	10 bar	16 bar
Medium		Water - Air			Water - Air			Water - Air		
A		401			480			565		
B		339			368			459		
ØC		541			570			598		
D		114			127			154		
Double acting	Actuator	T60	T65	T70	T65	T70		T70	T75	
	H	658	658	729	737	808		893	893	
	U	467	525	636	525	636		636	734	
	V	230	45,8	82,96	45,8	82,96		82,96	96	
Weight		113	164	147	217	247		254	342	
Single acting	Actuator	T70	T75	-	T75	-	-	-	-	-
	H	729	729	-	808	-	-	-	-	-
	U	636	734	-	734	-	-	-	-	-
	V	82,96	96	-	96	-	-	-	-	-
Weight		147	209	-	262	-	-	-	-	-

Dimensions in mm subject to manufacturing tolerance / Weights in kg
For other dimensions, please, consult us

SERIES VF750 DN25-600 with Electric Actuator

Main Valve Parameters



DN	Design pressure	Medium	A	B	ØC	D	Actuator	H	U	V	W	Approx. weight
25	16 bar	Water - Air	121	53	65	33	CMVLH10	269	169	104	122	3
32	16 bar	Water - Air	121	57	73	33	CMVLH10	269	169	104	122	3
40	16 bar	Water - Air	130	61	82	33	CMVLS20	326	181	214	128	4
50	16 bar	Water - Air	137	77	90	43	CMVLS20	333	181	214	128	5
65	16 bar	Water - Air	142	87,5	103	46	CMVLS35	338	181	214	128	6
80	16 bar	Water - Air	158	95	120	46	CMVLS55	354	181	214	128	7
100	16 bar	Water - Air	180	107	152	52	CMVLS85	376	181	214	128	10
125	16 bar	Water - Air	192	121,5	180	56	CMVLH140	446	235	104	122	14
150	16 bar	Water - Air	215	144	207	56	CMVLH140	469	235	104	122	16
200	16 bar	Water - Air	242	171	260	60	CMVLH300	496	235	214	128	21
250	6 bar	Water - Air	280	205	315	68	CMVLH300 ⁽¹⁾	534	235	214	128	36
300	16 bar	Water - Air	310	235	370	78	⁽²⁾	-	-	-	-	43
350	16 bar	Water - Air	334	260	418	78	⁽²⁾	-	-	-	-	65
400	16 bar	Water - Air	361	307	470	102	⁽²⁾	-	-	-	-	96
450	16 bar	Water - Air	401	339	541	114	⁽²⁾	-	-	-	-	128
500	16 bar	Water - Air	480	368	570	127	⁽²⁾	-	-	-	-	181
600	16 bar	Water - Air	565	459	598	154	⁽²⁾	-	-	-	-	261

(1) With intermediate coupling bracket
(2) On request

Dimensions in mm subject to manufacturing tolerance / Weights in kg

Solutions on Control Accesories and Actuation

UNIWAT butterfly valves can be provided with a wide range of solutions on control accessories and actuation which is all packaged at our works according to customer specifications. The modular system permits to distributors and plant users to assemble or replace the diverse options in site. Virtually most applications that may be encountered on the industry today are covered with the standard range of actuation and accessories, nevertheless, other customer tailored solutions can be provided by our R&D Section.

Position Indication Arrangements on Manual Valves

Special designs of proven reliability have been engineered by our R&D section to provide UNIVAL users with more service options.



Valve with hand lever
with electromechanical
limit switches



Valve with hand lever
with inductive proximity
limit switches



Valve with worm gear
with electromechanical
limit switches



Valve with worm gear
with inductive proximity
limit switches



Valve with hand lever with
limit switches box (metal or plastic)



Valve with worm gear with
limit switches box (metal or plastic)



Other options



Stem extensions



Pad Locked lever

Stem Extensions; either for manual operated valves or actuated ones. The length of extension is made to the customer specification, and provides bolting arrangement on both sides: valve stem and actuator stem side with upper part according to ISO 5211 standard.

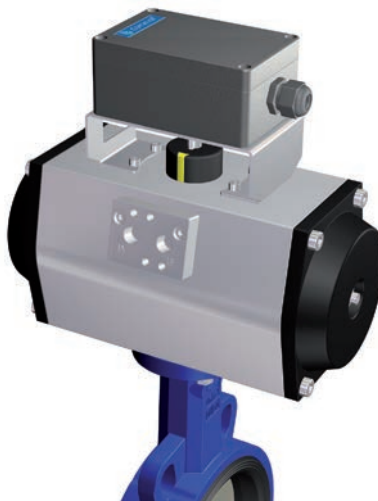
Pad Locked lever; this simple system prevents unauthorized operation at the plant. It is arranged on request.

Pneumatic Actuators CMVL T Series - Options and Accesories

Valve position indication can be provided by some arrangements such as Limit Switches that can be mounted either onto the actuator shell or cased into plastic or metal boxes.



Inductive proximity limit switches

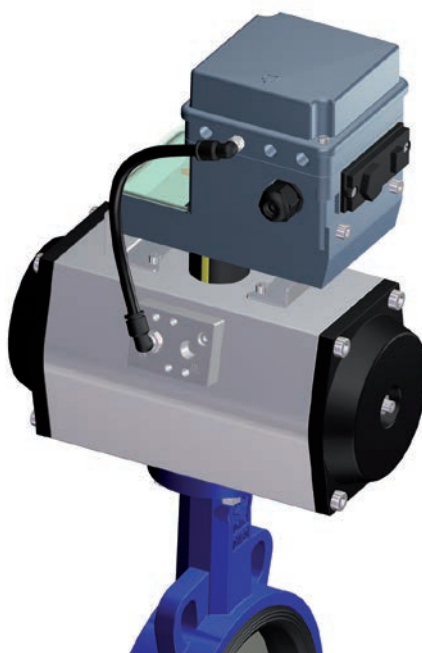


Metal or plastic limit switches boxes

Solenoid Valves in diverse materials and configurations can be provided as the most common accessories on pneumatic actuators. For throttling services a range of standard or smart Positionners can be adapted onto the actuators. Intermediate Gear Boxes can be fitted in all cases for emergency manual actuation.



Solenoid Valves for On/Off control



Pneumatic or Electropneumatic,
Standard or Intelligent Positionners



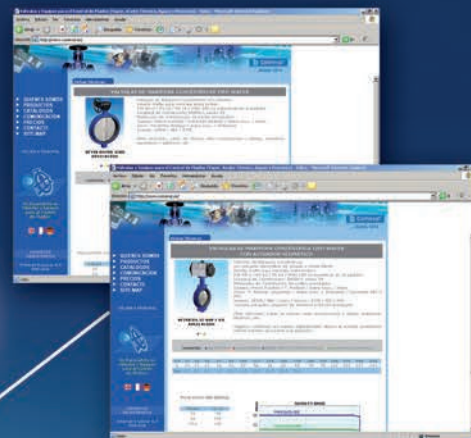
Intermediate Gear Box for
emergency manual actuation

Marketing Tools Available to Distributors

A rich assortment of Uniwat® marketing tools are available to our distributors worldwide, visit our corporate Web site www.comeval.es for more details.



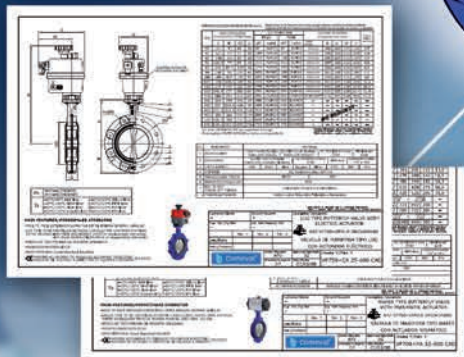
Data Sheets Manual
Comprehensive of all technical and engineering information on the comprehensive portfolio.



Web Site Product Sheet
Valve description, main dimensions, operating parameters and other links accessible at your finger tips.

Arrangement Drawings

Standardized sectional parts and dimensional drawings for use on engineering projects or enquiries.



Cut way / Demo Samples



Price Lists

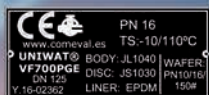
Up dated price book comprehensive of all models including actuated valves.

Join us on the net to start your Uniwat® experience
www.comeval.es



Operating and Maintenance Manuals

Provided along every valve into the sealed plastic bag. Also accessible via Internet at all times



Traceability

Valves are provided with a riveted name plate ensuring traceability, year of manufacture and main parameters. Valves are individually preserved into a sealed air bubble plastic bag and then on sets of some number of valves per cardboard box to assist with handling and storing. Please ask your Uniwat® distributor for packaging details. (no minimum order requirement is imposed).

Excelling the best.

Uniwat®



www.comeval.es