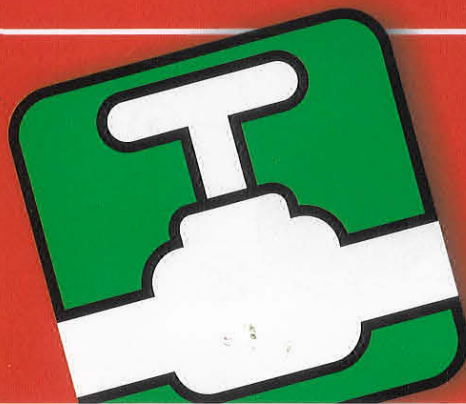
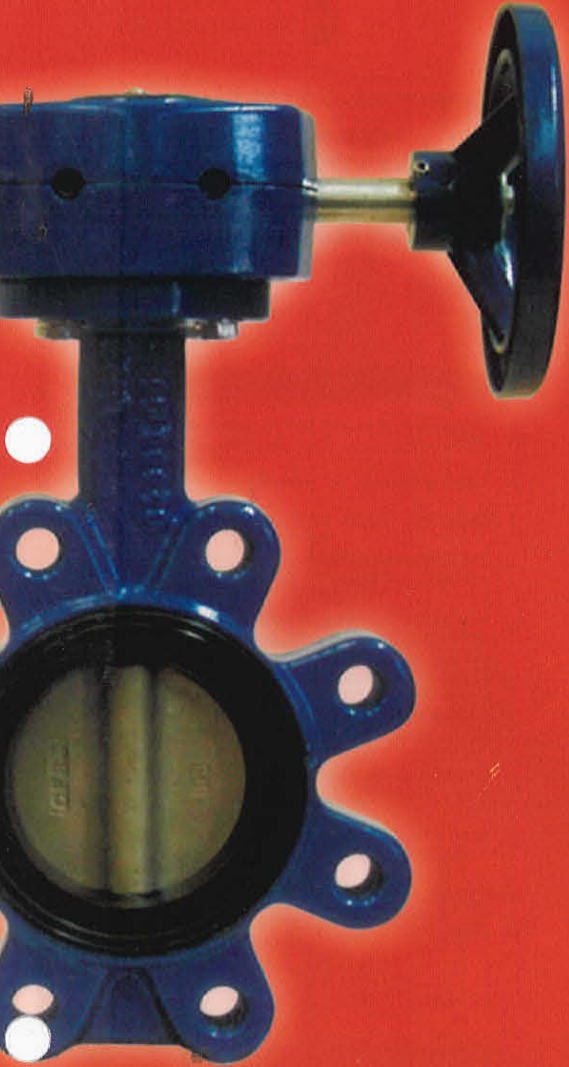


VALVOLE A FARFALLA

BUTTERFLY VALVE



**valvorbica  
industriale** SPA

CATALOGO TECNICO | TECHNICAL CATALOGUE

## INFORMAZIONI TECNICHE

## TECHNICAL INFORMATION



- PRODOTTO IN CONFORMITÀ ALLA DIRETTIVA 97/23/EC "PRESSURE EQUIPMENT DIRECTIVE" (PED)
- ENTE NOTIFICATORE 0409 
- PROVA DI PRESSIONE SECONDO: EN 12666-1
- SCARTAMENTO SECONDO LE NORME: ISO 5752 SERIE 20; EN 558 SERIE 20; API 609 SERIE 20
- VALVOLA COMPLETAMENTE REVISIONABILE, OGNI SINGOLO COMPONENTE PUÒ ESSERE SOSTITUITO

APPLICATION OF THE COUNCIL DIRECTIVE 97/23/EC ON PRESSURE EQUIPMENT (PED)

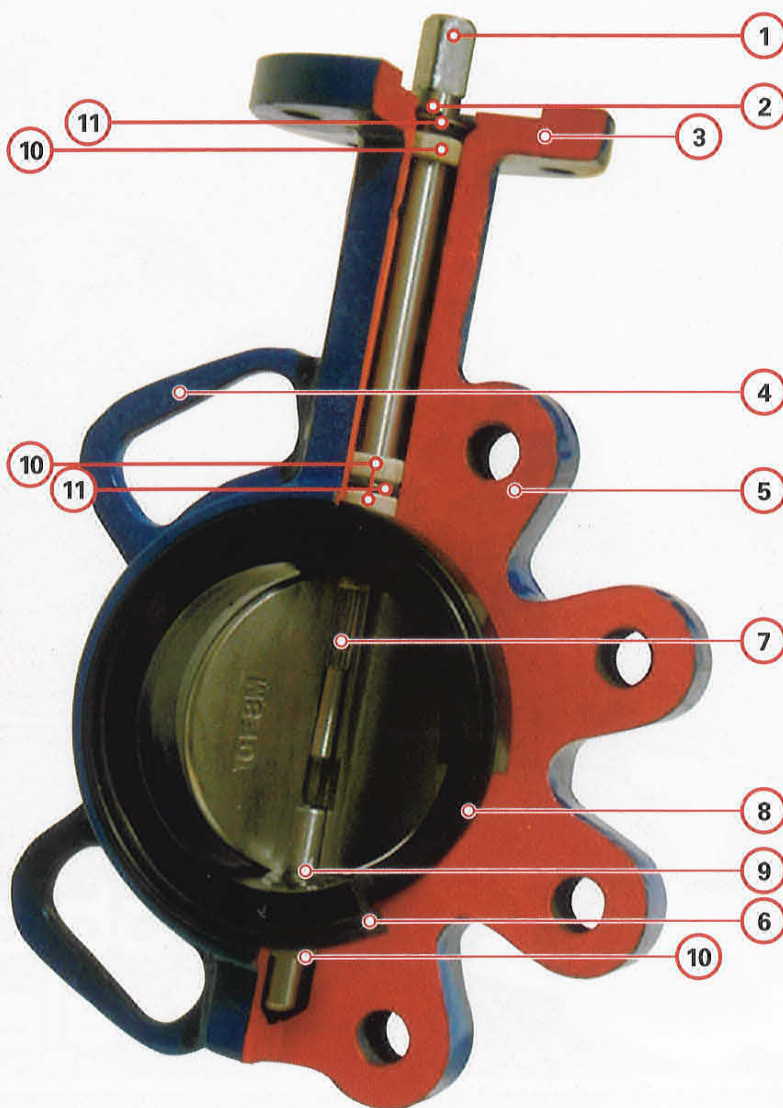


NOTIFIED BODY 0409

PRESSURE TEST PROCEDURE ACCORDING TO: EN 12666-1

FACE TO FACE: ISO 5752 SERIES 20;  
EN 558 SERIES 20; API 609 SERIES 20

VALVE WHICH CAN BE COMPLETELY OVERHAULED,  
EACH SINGLE PART CAN BE SUBSTITUTED



N.	
1	Quadro e base di raccordo per accoppiamento diretto con sistemi automatici di manovra
2	Sistema antiespulsione dell'asse
3	Basamento di raccordo conforme EN ISO 5211
4	Diametri versione Wafer e Lug dal DN 32 al DN 600
5	Corpo versione LUG raccordabile PN 10/16 versione WAFER raccordabile PN 6/10/16/ASA 150
6	Manicotto di tenuta a doppio inserto nel corpo
7	Lavorazione di precisione dell'asse superiore per un perfetto innesto nel disco
8	Scanalatura per alloggiare risalto sul manicotto al fine di garantire sempre un perfetto alloggiamento
9	Asse inferiore filettato per facilitare lo smontaggio e il riassetto
10	Boccola
11	O-ring

N.	
1	Square and mount flange per direct joint with automatic handle processing
2	Anti blow out of shaft
3	ISO 5211 actuator mount flange
4	WAFER an LUG diameters from DN 32 to DN 600
5	LUG flange standard PN 10 / 16 WAFER flange standard PN 6 / 10 / 16 / ASA 150
6	U type seat
7	Precision in the manufacture of the upper shaft for a perfect clutch in the disc
8	Groove to put up the seat in order to have a perfect functioning in every situation
9	Treaded lower part in order to help the take out and the reassemble the valve
10	Bearing
11	O-ring



**LISTA MATERIALI COMPONENTI**

<b>CORPO</b>	GHISA SFEROIDALE 400-15 SG RIVESTIMENTO EPOSSIDICO
<b>ASSE</b>	ACCIAIO INOX 410
	ACCIAIO INOX 316
	ACCIAIO INOX 431
<b>MANICOTTO</b>	EPDM -20°C +110°C
	NBR -10°C + 80°C
	FKM -20°C +200°C
<b>DISCO</b>	GHISA SFEROIDALE 400-15 SG PLACCATO NICKEL
	GHISA SFEROIDALE 400-15 SG RIVESTIMENTO EPOSSIDICO
	ACCIAIO INOX 316
	BRONZO ALLUMINIO
<b>LEVA</b>	ALLUMINIO
<b>RIDUTTORE MANUALE</b>	ALLUMINIO STAMPATO
	GHISA
<b>BOCCOLA</b>	PTFE
<b>O-RING</b>	EPDM - NBR - FKM
<b>MOLLA DI FISSAGGIO</b>	ACCIAIO INOX
<b>ANELLO DI TENUTA</b>	ACCIAIO

**MATERIALS LIST COMPONENTS**

DUCTILE IRON 400-15 SG EPOXY COATED	<b>BODY</b>	
STAINLESS STEEL 410 STAINLESS STEEL 316 STAINLESS STEEL 431	<b>SHAFT</b>	
	EPDM -20°C +110°C NBR -10°C + 80°C FKM -20°C +200°C	<b>SEAT</b>
		DUCTILE IRON 400-15 SG NICKEL PLATED DUCTILE IRON 400-15 SG EPOXY COATED
STAINLESS STEEL 316 ALUMINIUM BRONZE		
ALUMINIUM	<b>LEVER</b>	
DIE CAST ALUMINIUM CAST IRON	<b>WORM GEAR</b>	
PTFE	<b>BEARING</b>	
EPDM - NBR - FKM	<b>O-RING</b>	
STAINLESS STEEL	<b>SPRING RING</b>	
STEEL	<b>RETAINER RING</b>	

LEVA



LEVER

RIDUTTORE MANUALE A VOLANTINO



WORM GEAR

ATTUATORE PNEUMATICO  
DOPPIO EFFETTO / SINGOLO EFFETTO



PNEUMATIC ACTUATOR  
double / single effect

MOTORE ELETTRICO



ELECTRONIC ACTUATORS

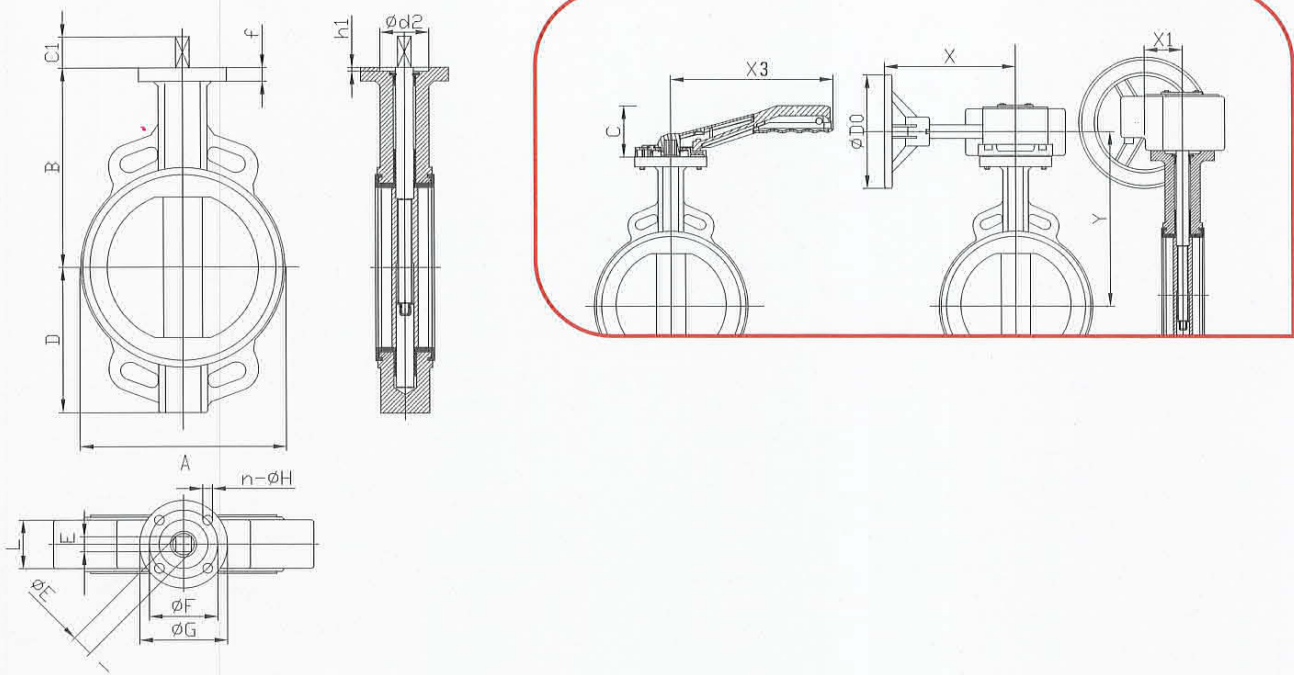


## DIMENSIONALE

### DIMENSIONAL

#### VALVOLE A FARFALLA TIPO WAFER CON LEVA O RIDUTTORE MANUALE DN50 / DN300

#### BUTTERFLY VALVE WAFER TYPE WITH HAND LEVER OR WORM GEAR DN50 / DN300



### DIMENSIONI

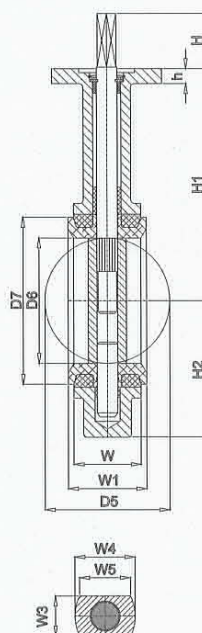
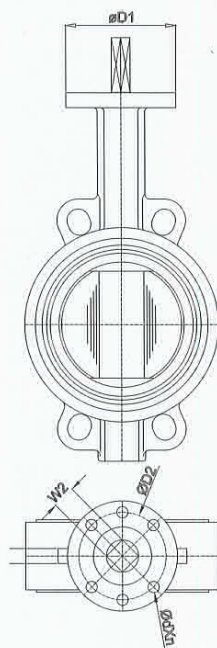
### SIZE

DN	A	B	D	E	E1	F	G	n x øH	ISO5211	L	C1	d2	h1	f	D0	X	X1	Y	X3	C
50	92	141	62	11	13.5	70	90	4xø9	F07	43	19	56	3	12	134	145	46	172	211	76
65	104	153.5	73	11	13.5	70	90	4xø9	F07	46	19	56	3	12	134	145	46	185	211	76
80	121.5	160	86	11	13.5	70	90	4xø9	F07	46	19	56	3	12	134	145	46	191	211	76
100	152	178	105.5	11	14	70	90	4xø9	F07	52	19	56	3	12	134	145	46	210	258	85
125	178	191	122	14	18	70	90	4xø9	F07	56	19	56	3	12	134	145	46	223	258	85
150	200	201	137	14	18	70	90	4xø9	F07	56	19	56	3	12	134	145	46	235	258	85
200	266	247	174	17	22.1	102	125	4xø11	F10	60	25	71	3	13	215	211	78	286	360	95
250	316	280	207	22	28.4	102	125	4xø11	F10	68	40	71	3	18	215	211	78	318	360	95
300	366	324	252	22	29	102	125	4xø11	F10	78	40	71	3	18	215	211	78	362	360	95



**VALVOLA A FARFALLA TIPO WAFER  
CON LEVA O RIDUTTORE MANUALE  
DN32/40 - DN350/600**

**BUTTERFLY VALVE WAFER TYPE  
WITH HAND LEVER OR WORM GEAR  
DN32/40 - DN350/600**



**DIMENSIONI**

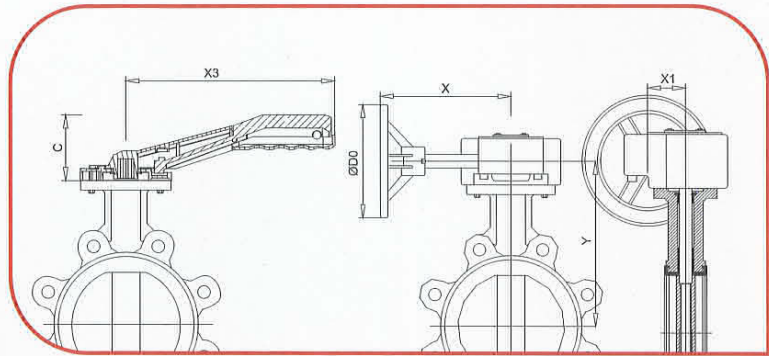
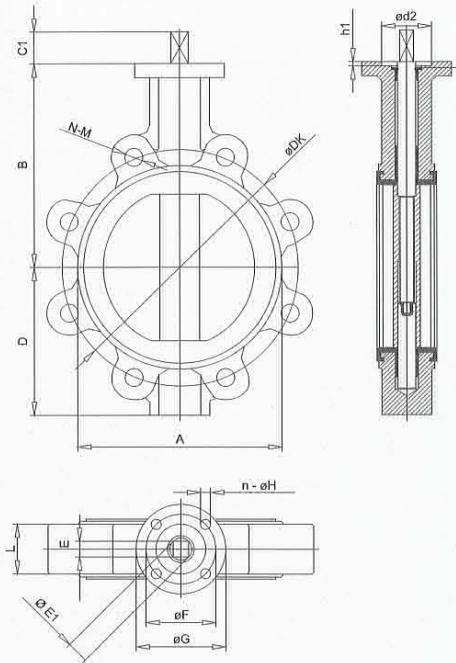
**SIZE**

DN	H	H1	H2	h	W	W1	W2	W3	W4	W5	D1	D2	D5	D6	D7	dxn	
32	42	135	66	12	33	38	9		Ø27		90	70	42.5	37.5	58	10	6
40	42	133	69	14	33	36.5	9		Ø28		90	70	42.5	37.5	66	10	6
350	42	360	270	20	76	81	22	49	56	37	125	102	334	326	371	12	4
400	42	400	315	20	86	90	22		Ø76		197	140	390	381	436	18	4
450	52	422	328	20	90	109	27		Ø74		197	140	441	430	486	18	4
500	64	480	361	22	131	136	27		Ø80		197	140	492	481	562	18	4
600	70	562	459	22	151	158.5	36		100 x 100		276	165	593	581	652	22	4



**VALVOLA A FARFALLA TIPO LUG  
CON LEVA O RIDUTTORE MANUALE  
DN50 / DN300**

**BUTTERFLY VALVE LUG TYPE  
WITH HAND LEVER OR WORM GEAR  
DN50 / DN300**



**DIMENSIONI**

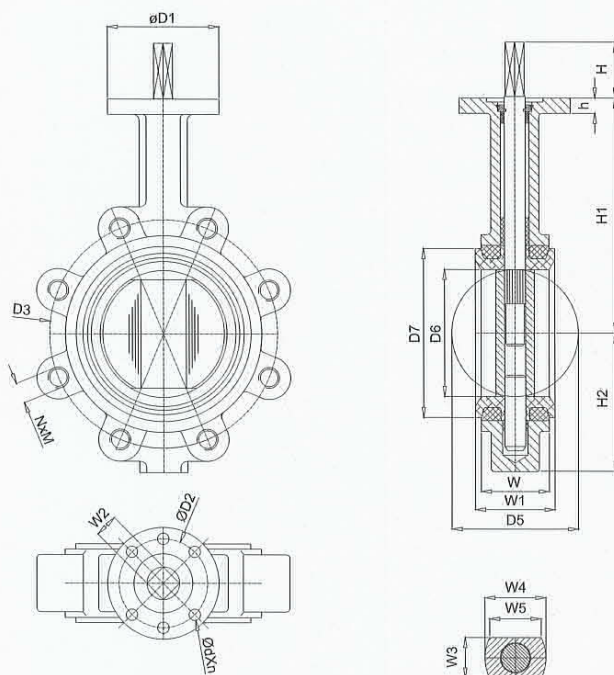
**SIZE**

DN	Dk	A	B	D	E	E1	F	G	n-øH	N-øM	ISO5211	L	f	C1	d2	h1	D0	X	X1	Y	X3	C
50	125	93	141	62	11	13.5	70	90	4xø9	4-M16	F07	43	12	19	56	3	134	145	46	172	211	76
65	145	104	153.5	72	11	13.5	70	90	4xø9	4-M16	F07	46	12	19	56	3	134	145	46	185	211	76
80	160	121	160	87	11	13.5	70	90	4xø9	8-M16	F07	46	12	19	56	3	134	145	46	191	211	76
100	180	152	178	105.5	11	14	70	90	4xø9	8-M16	F07	52	12	19	56	3	134	145	46	210	258	85
125	210	178	191	121	14	18	70	90	4xø9	8-M16	F07	56	12	19	56	3	134	145	46	223	258	85
150	240	200	201	138	14	18	70	90	4xø9	8-M20	F07	56	12	19	56	3	134	145	46	235	258	85
200	295	260	247	173.5	17	22.1	102	125	4xø11	8-M20	F10	60	12	25	71	3	215	211	78	286	360	95
250	350	315	280	207	22	28.45	102	125	4xø11	12-M20	F10	68	18	40	71	3	215	211	78	318	360	95
300	400	374	324	250	22	29	102	125	4xø11	12-M20	F10	78	18	40	71	3	215	211	78	362	360	95



**VALVOLA A FARFALLA TIPO LUG  
CON LEVA O RIDUTTORE MANUALE  
DN32/40 - DN350/600**

**LUG TYPE BUTTERFLY VALVE  
WITH HAND LEVER OR WORM GEAR  
DN32/40 - DN350/600**



**DIMENSIONI**

**SIZE**

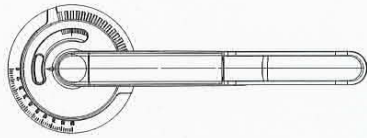
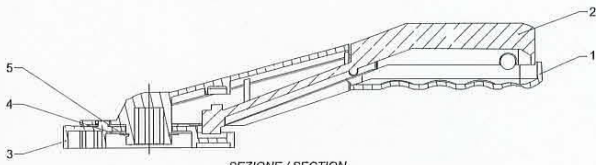
DN	H	H1	H2	h	W	W1	W2	W3	W4	W5	D1	D2	D3	N x M	D5	D6	D7	dxn	
32	42	90	52	13	33	38	9	26	32	26	90	70	100	4-M16	42.5	37.5	58	10	6
40	42	128	62	12	33	36.5	9	27	35	28	90	70	110	4-M16	42.5	37.5	66	10	6
350	42	360	270	20	76	81	22	54	56	39	125	102	470	16-M24	334	326	371	12	4
400	42	400	315	20	86	90	22		Ø76		197	140	525	16-M27	390	381	436	18	4
450	52	422	328	20	90	109	27		Ø74		197	140	585	20-M27	441	430	486	18	4
500	64	480	361	22	131	136	27		Ø80		197	140	650	20-M30	492	481	532	18	4
600	70	562	459	22	151	158.5	36		100 x 100		276	165	770	20-M33	593	581	652	22	4



## DIMENSIONALE

### DIMENSIONAL

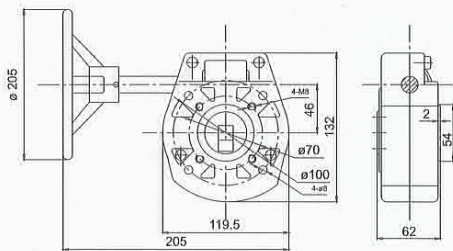
#### LEVA ALLUMINIO



#### ALUMINIUM HAND LEVER

N°	DESCRIZIONE	Q.TY	MATERIALE
N°	NAME		MATERIAL
1	LEVA MAIN HAND LEVER	1	ALLUMINIO ALUMINIUM
2	SBLOCCO SUBSIDIARY HAND LEVER	1	ALLUMINIO ALUMINIUM
3	PIATTELLO ANGLE PLATE	1	ALLUMINIO ALUMINIUM
4	RONDELLA WASHER	1	NYLON NYLON
5	ANELLO DI TENUTA RETAINER RING	1	65MN 65MN

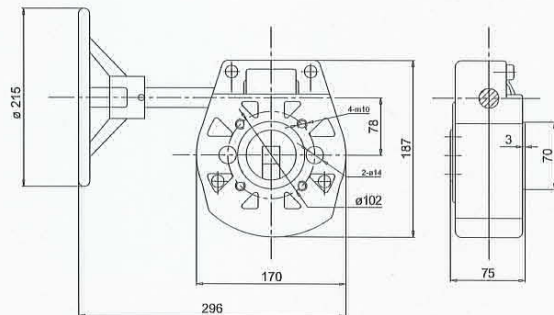
#### RIDUTTORE MANUALE



DN32/150

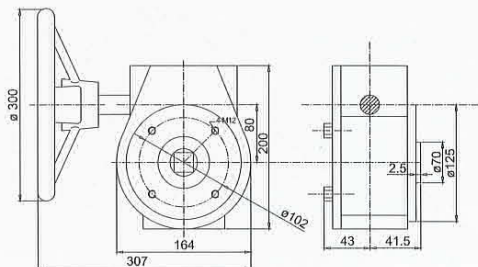
DN32/150

#### WORM GEAR



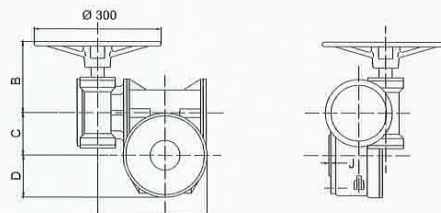
DN200/300

DN200/300



DN350

DN350



DN	B	C	D
400	100	140	33.3
450	100	140	38.2
500	100	140	41.3
600	130	165	50.7

DN400/600

DN400/600



**BULLONERIA CON FLANGE UNI EN 1092**

**BOLTS FOR VALVE INSTALLATION SIZE AND QUALITY WITH FLANGES UNI EN 1092**

DN	PN 6					PN 10					PN 16				
	WAFER			LUG		WAFER			LUG		WAFER			LUG	
	N° Q.TY	DIAM. DIA.	LUNGH. LENGHT.	N° Q.TY	DIAM. x LUNGH. DIA. x L.	N° Q.TY	DIAM. DIA.	LUNGH. LENGHT.	N° Q.TY	DIAM. x LUNGH. DIA. x L.	N° Q.TY	DIAM. DIA.	LUNGH. LENGHT.	N° Q.TY	DIAM. x LUNGH. DIA. x L.
32	4	M12	80	4x2	M12x25	4	M16	90	4x2	M16x30	4	M16	90	4x2	M16x30
40	4	M12	80	4x2	M12x25	4	M16	90	4x2	M16x30	4	M16	90	4x2	M16x30
50	4	M12	100	4x2	M12x30	4	M16	110	4x2	M16x35	4	M16	110	4x2	M16x35
65	4	M12	100	4x2	M12x35	4	M16	120	4x2	M16x35	4	M16	110	4x2	M16x35
80	4	M16	110	4x2	M12x35	4	M16	120	4x2	M16x35	8	M16	120	8x2	M16x35
100	8	M16	120	8x2	M16x40	8	M16	130	8x2	M16x40	8	M16	130	8x2	M16x40
125	8	M16	140	8x2	M16x45	8	M16	140	8x2	M16x45	8	M16	140	8x2	M16x45
150	8	M16	140	8x2	M16x45	8	M20	150	8x2	M20x45	8	M20	150	8x2	M20x45
200	8	M16	150	8x2	M16x45	8	M20	150	8x2	M20x50	12	M20	160	12x2	M20x50
250	12	M16	160	12x2	M16x50	12	M20	170	12x2	M20x55	12	M24	180	12x2	M24x55
300	12	M20	190	12x2	M20x55	12	M20	180	12x2	M20x60	12	M24	200	12x2	M24x65
350	12	M20	190	12x2	M20x60	16	M20	180	16x2	M20x60	16	M24	200	16x2	M24x65
400	16	M20	220	16x2	M20x70	16	M24	220	16x2	M24x75	16	M27	240	16x2	M27x80
450	16	M20	250	16x2	M20x80	20	M24	250	20x2	M24x85	20	M27	260	20x2	M27x90
500	20	M20	270	20x2	M24x80	20	M24	270	20x2	M24x95	20	M30	300	20x2	M30x100
600	20	M24	300	20x2	M24x90	20	M27	320	20x2	M24x110	20	M33	360	20x2	M33x120

**COEFFICIENTE DI PORTATA**

**KV VALUE / VALVE RATE FLOW COEFFICIENTS**

DN	ANGOLO DI APERTURA / OPENING ANGLE								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	-	0.9	6.3	14	29	53	94	116	118
65	-	2.5	11	28	50	92	168	245	258
80	-	5.3	22	50	90	157	282	460	510
100	-	9.8	40	90	158	268	485	823	926
125	-	16	70	150	263	430	766	1350	1500
150	-	84	113	230	395	640	1096	1850	2170
200	-	112	212	405	678	1084	1785	3045	3842
250	20	155	309	590	989	1590	2716	4765	5014
300	48	283	384	745	1253	2058	3742	6820	9230
350	125	314	660	1185	2005	3222	5196	9300	10790
400	162	413	863	1545	2622	4200	6772	12140	14081
450	198	512	1070	1915	3249	5216	8416	15150	17842
500	248	630	1325	2365	4015	6440	10400	18624	22030
600	356	905	1899	3408	5778	9273	14985	26758	31780

IL COEFFICIENTE KV RAPPRESENTA LA PORTATA IN M3/H CHE PRODUCE UNA PERDITA DI CARICO DI 1.0 BAR NELLA VALVOLA COMPLETAMENTE APERTA

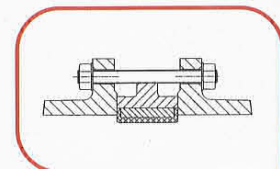
Kv FLOW FACTOR IS THE FLOW RATE IN m3/h THAT WILL PRODUCE A 1.0 BAR PRESSURE DROP IN THE FULL OPEN VALVE

**TABELLA COPPIE IN Nm**

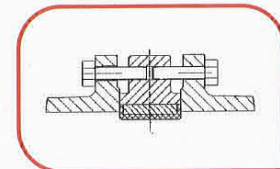
**VALVE SEATING TORQUES Nm**

DN	6 BAR	10 BAR	16 BAR
50	14	14	15
65	14	14	17
80	19	19	22
100	33	33	34
125	46	46	48
150	72	72	73
200	145	145	155
250	230	230	236
300	320	320	330
350	560	570	790
400	770	850	1180
450	1210	1220	1520
500	1420	1430	1930
600	2820	2830	3670

**TIPO WAFER WAFER TYPE**



**TIPO LUG LUG TYPE**





COME LEGGERE IL CATALOGO

HOW TO READ THE CATALOGUE

DISCO

DISC

	GHISA SFEROIDALE 400-15 SG NICHELATA DUCTILE IRON 400-15 SG
	GHISA SFEROIDALE 400-15 SG RIVESTIMENTO EPOSSIDICO DUCTILE IRON 400-15 SG EPOXY COATED
	ACCIAIO INOX 316 STAINLESS STEEL 316
	BRONZO ALLUMINIO ALUMINIUM BRONZE

