REFERENCE DRAWING & PART LIST

Perfect Harmony with Technology
KOREA UNICOMVALVE CO., LTD.

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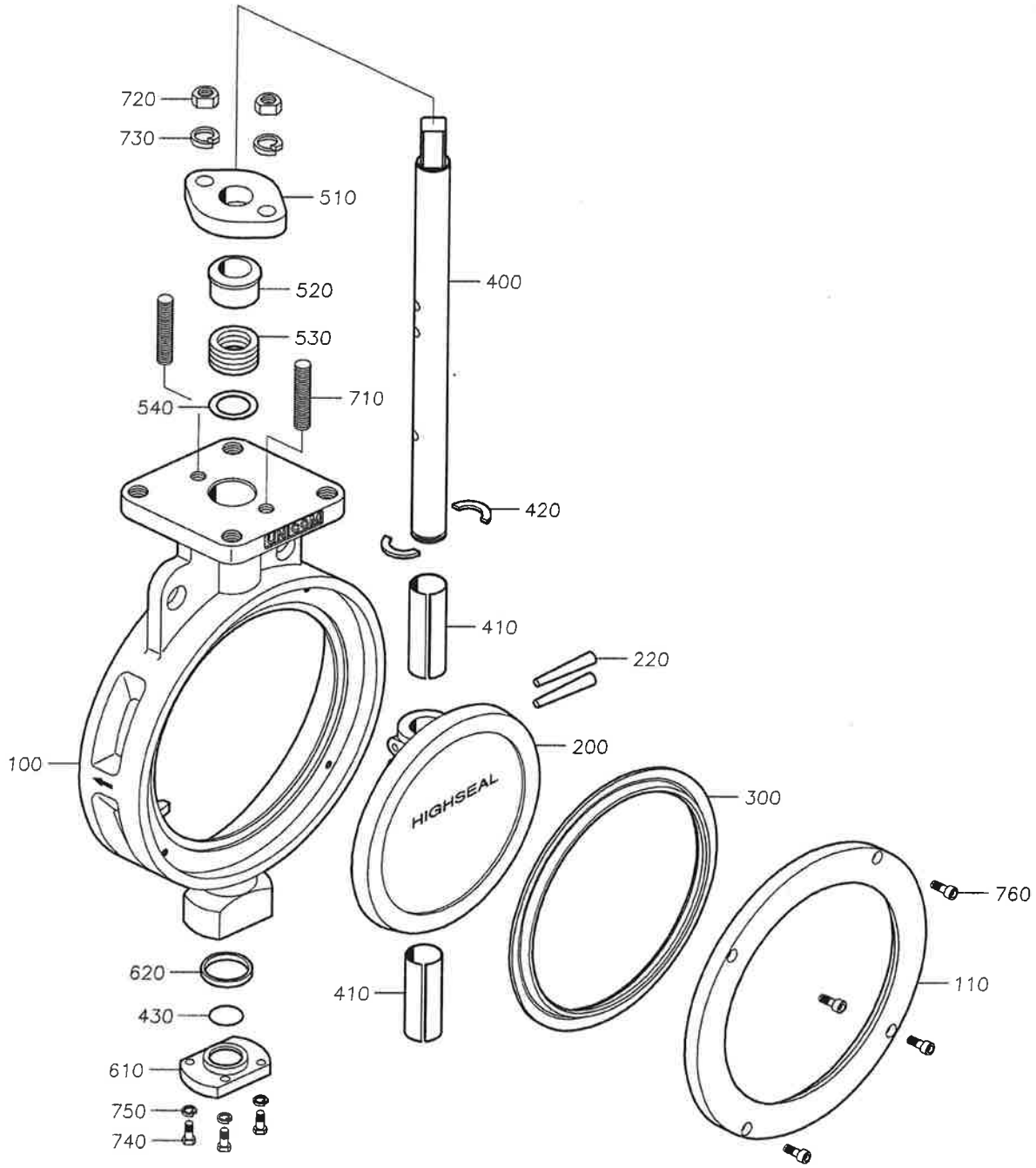
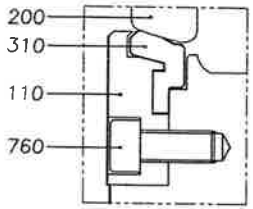
UNICOM	HIGHSEAL VALVES Designation of Parts	Valve Type ; GTD/ MTD/ FSD (Wafer)



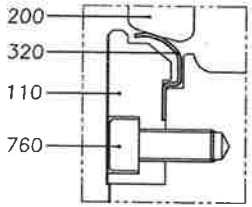
100 Valve Body	420 Shaft Retainer	620 Bottom Packing
110 Insert Ring	430 Shaft Spacer	710 Stud Bolt
200 Disc	510 Gland Flange	720 Hex. Nut
220 Disc Pin	520 Packing Gland	730 Spring Washer
300 Seat	530 Gland Packing	740 Hex. Bolt
400 Shaft	540 Packing Retainer	750 Spring Washer
410 Shaft Bearing	610 Bottom Plug	760 Wrench Bolt

Detail of "A"

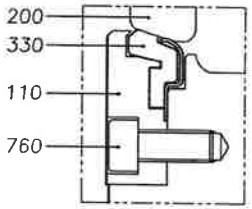
GTD

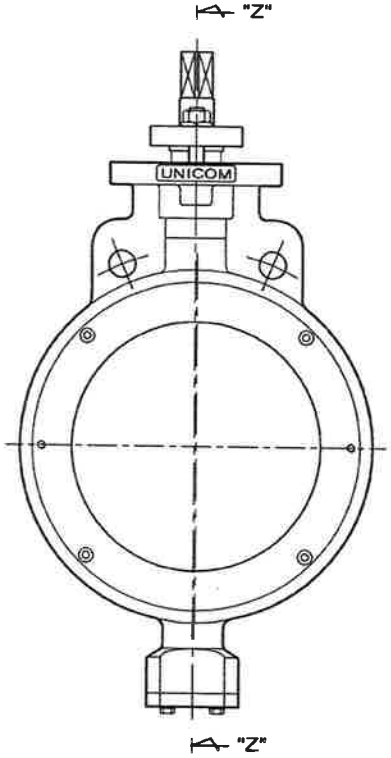


MTD

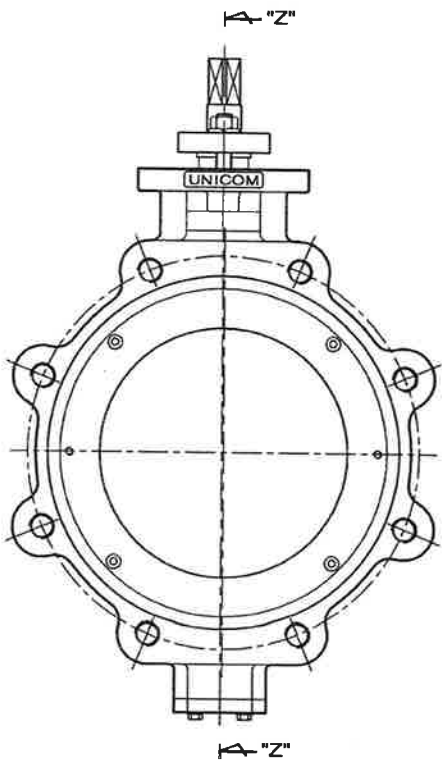


FSD

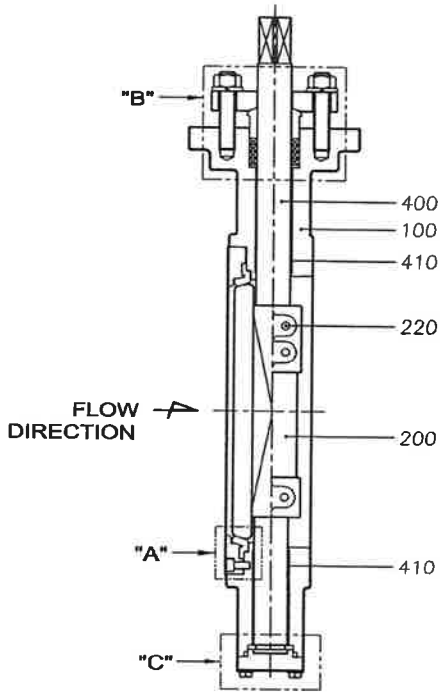




Wafer Type

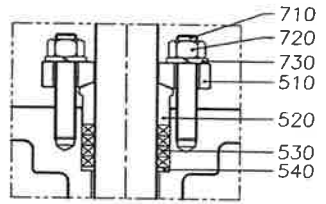


Lugged Type

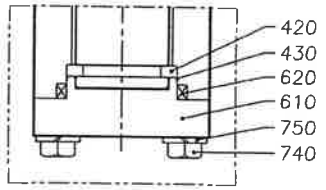


Section of "Z-Z"

Detail of "B"



Detail of "C"



• *Parts List No. :* UH-GTD-001 ~ 008
UH-MTD-001 ~ 008
UH-FSD-001 ~ 008

UNICOM

HIGHSEAL VALVES
Type GTD/ MTD/ FSD

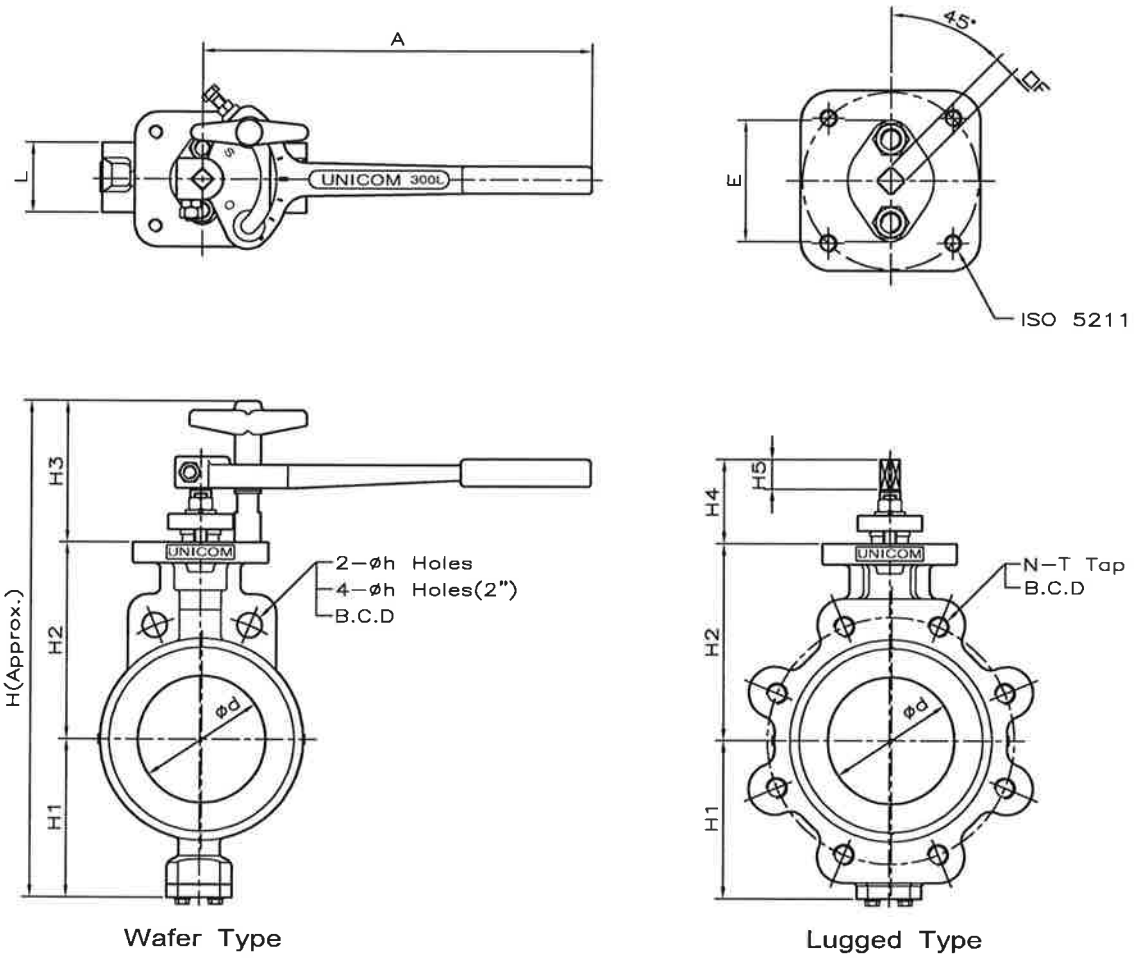
Dwg No. : UH-01-001
Revision No. : 0
Date : May. 2002

Model ;

GTD/ MTD/ FSD

HIGHSEAL VALVES

ANSI Class 150 (PN 10/ PN 16/ PN20/ PN25)



Wafer Type

Lugged Type

- Flange Rating; ANSI B16.5 Class150
- L = Face to Face dimensions according to API Std. 609
  (EN 558/ ISO 5752/ BS 5155/ DIN 3202 on request)
- T1 = Weight of Wafer Type(With Hand Lever)
- T2 = Weight of Lugged Type(With Hand Lever)

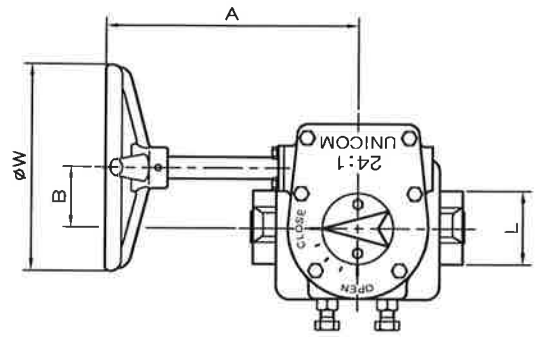
DN mm *in*	H mm *in*	H1 mm *in*	H2 mm *in*	H3 mm *in*	H4 mm *in*	H5 mm *in*	ød mm *in*	A mm *in*	E mm *in*	□F mm *in*	L mm *in*	B.C.D mm *in*	øh mm *in*	N-T	ISO 5211	T1 kg *lbs*	T2 kg *lbs*
50 *2*	314 *12.36*	100 *3.94*	105 *4.13*	109 *4.29*	65 *2.56*	23 *0.91*	49 *1.93*	300 *11.81*	70 *2.76*	11 *0.43*	43 *1.69*	120.7 *4.75*	19.0 *0.75*	4-5/8"x11unc	F10	7 *15*	8 *18*
65 *2.5*	335 *13.19*	103 *4.06*	123 *4.84*	109 *4.29*	65 *2.56*	23 *0.91*	62 *2.44*	300 *11.81*	70 *2.76*	12 *0.47*	46 *1.81*	139.7 *5.5*	19.0 *0.75*	4-5/8"x11unc	F10	8 *18*	10 *22*
80 *3*	350 *13.78*	111 *4.37*	130 *5.12*	109 *4.29*	65 *2.56*	23 *0.91*	74 *2.91*	300 *11.81*	70 *2.76*	12 *0.47*	48 *1.88*	152.4 *6.0*	19.0 *0.75*	4-5/8"x11unc	F10	9 *20*	12 *27*
100 *4*	383 *15.07*	122 *4.80*	152 *5.98*	109 *4.29*	65 *2.56*	23 *0.91*	95 *3.74*	300 *11.81*	70 *2.76*	12 *0.47*	54 *2.12*	190.5 *7.5*	19.0 *0.75*	8-5/8"x11unc	F10	11 *24*	18 *40*
125 *5*	444 *17.48*	162 *6.38*	172 *6.77*	110 *4.33*	65 *2.56*	24 *0.94*	118 *4.65*	350 *13.78*	70 *2.76*	16 *0.63*	57 *2.25*	215.9 *8.5*	22.5 *0.88*	8-3/4"x10unc	F10	14 *31*	22 *49*
150 *6*	452 *17.80*	162 *6.38*	180 *7.09*	110 *4.33*	65 *2.56*	24 *0.94*	138 *5.43*	350 *13.78*	70 *2.76*	16 *0.63*	57 *2.25*	241.3 *9.5*	22.5 *0.88*	8-3/4"x10unc	F10	18 *40*	24 *53*
200 *8*	545 *21.46*	197 *7.76*	215 *8.46*	133 *5.24*	85 *3.35*	35 *1.38*	188 *7.40*	500 *19.69*	96 *3.78*	19 *0.75*	64 *2.50*	298.5 *11.75*	22.5 *0.88*	8-3/4"x10unc	F14	25 *55*	37 *82*

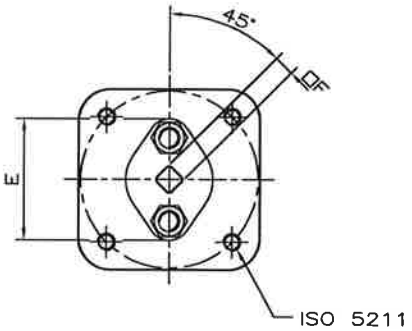
Model ;

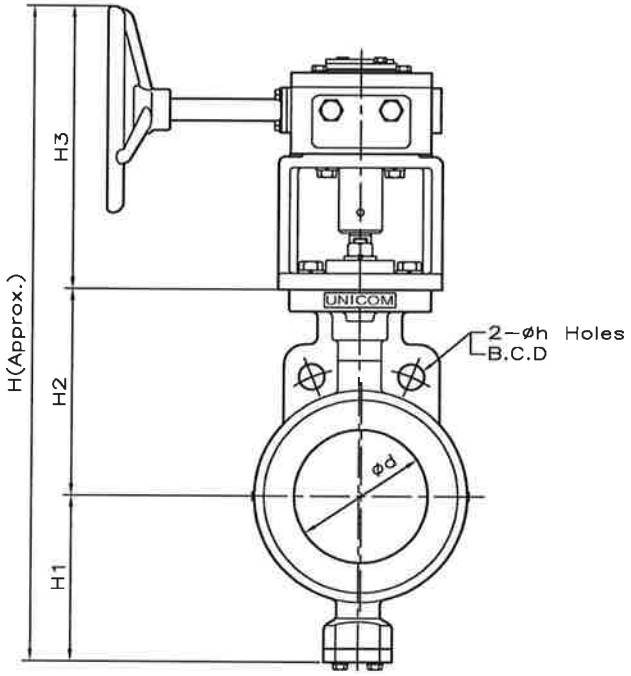
GTD/ MTD/ FSD

HIGHSEAL VALVES

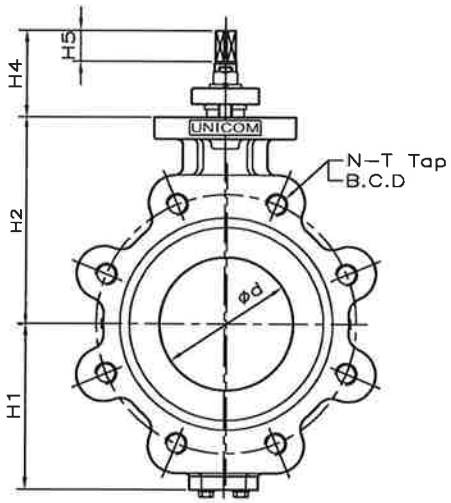
ANSI Class 150 (PN 10/ PN 16/ PN20/ PN25)







Wafer Type



Lugged Type

- Flange Rating; ANSI B16.5 Class150
- L = Face to Face dimensions according to API Std. 609
  (EN 588/ ISO 5752/ BS 5155/ DIN 3202 on request)
- T1 = Weight of Wafer Type(With Gear Box)
- T2 = Weight of Lugged Type(With Gear Box)

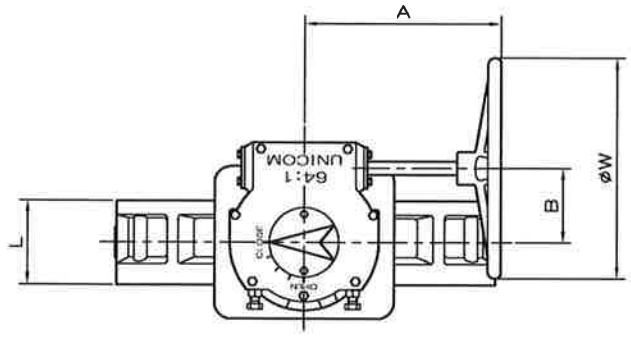
DN mm *in*	H mm *in*	H1 mm *in*	H2 mm *in*	H3 mm *in*	H4 mm *in*	H5 mm *in*	ød mm *in*	A mm *in*	B mm *in*	øW mm *in*	E mm *in*	□F mm *in*	L mm *in*	B.C.D mm *in*	øh mm *in*	N-T	ISO 5211	GEAR RATIO	T1 kg *lbs*	T2 kg *lbs*
50 *2*	413 *16.26*	100 *3.94*	105 *4.13*	208 *8.19*	65 *2.56*	23 *0.91*	49 *1.93*	186 *7.32*	45 *1.77*	152 *5.98*	70 *2.76*	11 *0.43*	43 *1.69*	120.7 *4.75*	19.0 *0.75*	4-5/8"x11unc	F10	24 : 1	15 *33*	17 *38*
65 *2.5*	434 *17.09*	103 *4.06*	123 *4.84*	208 *8.19*	65 *2.56*	23 *0.91*	62 *2.44*	186 *7.32*	45 *1.77*	152 *5.98*	70 *2.76*	12 *0.47*	46 *1.81*	139.7 *5.5*	19.0 *0.75*	4-5/8"x11unc	F10	24 : 1	16 *35*	18 *40*
80 *3*	449 *17.68*	111 *4.37*	130 *5.12*	208 *8.19*	65 *2.56*	23 *0.91*	74 *2.91*	186 *7.32*	45 *1.77*	152 *5.98*	70 *2.76*	12 *0.47*	48 *1.88*	152.4 *6.0*	19.0 *0.75*	4-5/8"x11unc	F10	24 : 1	18 *40*	20 *44*
100 *4*	482 *18.97*	122 *4.80*	152 *5.98*	208 *8.19*	65 *2.56*	23 *0.91*	95 *3.74*	186 *7.32*	45 *1.77*	152 *5.98*	70 *2.76*	12 *0.47*	54 *2.12*	190.5 *7.5*	19.0 *0.75*	8-5/8"x11unc	F10	24 : 1	19 *42*	25 *55*
125 *5*	542 *21.34*	162 *6.38*	172 *6.77*	208 *8.19*	65 *2.56*	24 *0.94*	118 *4.65*	186 *7.32*	45 *1.77*	152 *5.98*	70 *2.76*	16 *0.63*	57 *2.25*	215.9 *8.5*	22.5 *0.88*	8-3/4"x10unc	F10	24 : 1	22 *49*	29 *64*
150 *6*	550 *21.66*	162 *6.38*	180 *7.09*	208 *8.19*	65 *2.56*	24 *0.94*	138 *5.43*	186 *7.32*	45 *1.77*	152 *5.98*	70 *2.76*	16 *0.63*	57 *2.25*	241.3 *9.5*	22.5 *0.88*	8-3/4"x10unc	F10	24 : 1	25 *55*	32 *71*
200 *8*	711 *27.99*	197 *7.76*	215 *8.46*	299 *11.77*	85 *3.35*	35 *1.38*	188 *7.40*	268 *10.55*	62 *2.44*	265 *10.43*	96 *3.78*	19 *0.75*	64 *2.50*	298.5 *11.75*	22.5 *0.88*	8-3/4"x10unc	F14	30 : 1	37 *81*	47 *103*
250 *10*	778 *30.63*	229 *6.38*	250 *6.77*	299 *11.77*	85 *3.35*	35 *1.38*	235 *9.25*	268 *10.55*	62 *2.44*	265 *10.43*	96 *3.78*	22 *0.87*	71 *2.81*	362.0 *14.25*	25.5 *1.00*	12-7/8"x9unc	F14	30 : 1	49 *108*	64 *141*
300 *12*	844 *33.23*	270 *10.63*	275 *10.83*	299 *11.77*	90 *3.54*	40 *1.57*	275 *10.83*	268 *10.55*	62 *2.44*	265 *10.43*	96 *3.78*	27 *1.06*	81 *3.19*	431.8 *17.00*	25.5 *1.00*	12-7/8"x9unc	F14	30 : 1	60 *132*	83 *183*
350 *14*	921 *36.26*	307 *12.09*	315 *12.40*	299 *11.77*	90 *3.54*	40 *1.57*	318 *12.52*	268 *10.55*	62 *2.44*	265 *10.43*	96 *3.78*	30 *1.18*	92 *3.62*	476.3 *18.75*	28.5 *1.12*	12-1"x8unc	F14	30 : 1	75 *165*	108 *238*

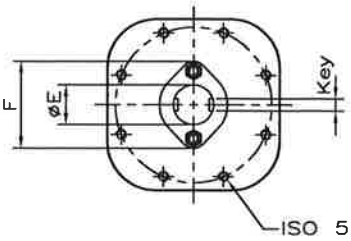
Model ;

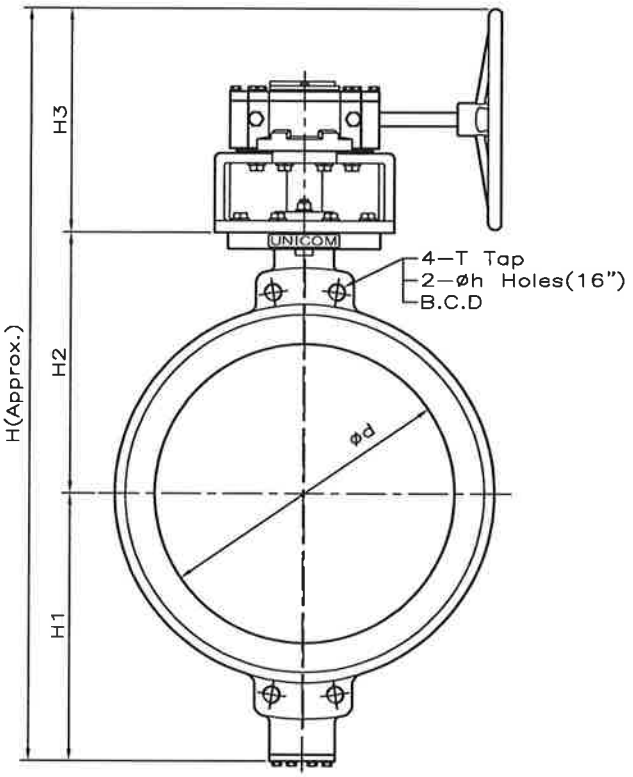
GTD/ MTD/ FSD

HIGHSEAL VALVES

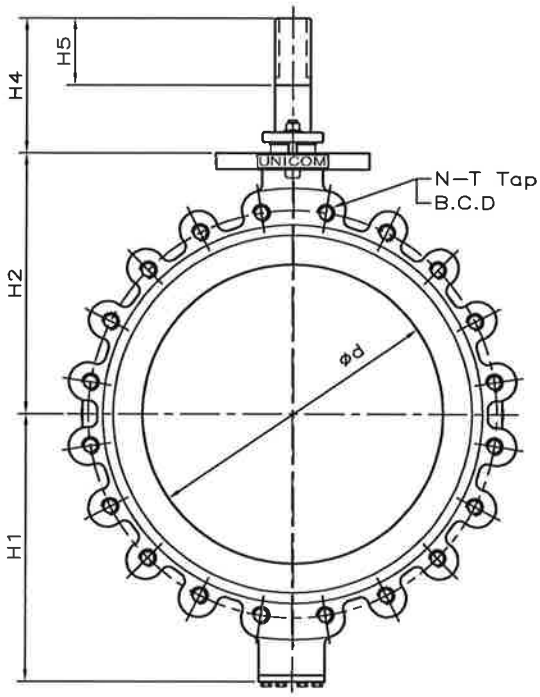
ANSI Class 150 (PN 10/ PN 16/ PN20/ PN25)







Wafer Type



Lugged Type

- Flange Rating; ANSI B16.5 Class150
- L = Face to Face dimensions according to API Std. 609
  (EN 558/ ISO 5752/ BS 5155/ DIN 3202 on request)
- T1 = Weight of Wafer Type(With Gear Box)
- T2 = Weight of Lugged Type(With Gear Box)

DN mm *in*	H mm *in*	H1 mm *in*	H2 mm *in*	H3 mm *in*	H4 mm *in*	H5 mm *in*	ød mm *in*	A mm *in*	B mm *in*	øW mm *in*	ø E mm *in*	F mm *in*	Key mm *in*	L mm *in*	B.C.D mm *in*	øh mm *in*	N-T	ISO 5211	GEAR RATIO	T1 kg *lbs*	T2 kg *lbs*
400 *16*	1104 *43.46*	350 *13.78*	360 *14.17*	394 *15.51*	230 *9.06*	100 *3.94*	361 *14.21*	310 *12.20*	106 *4.17*	362 *14.25*	42 *1.65*	124 *4.88*	15x12-85L *0.59x0.47-3.35L*	102 *4.0*	539.8 *21.25*	28.5 *1.12*	16-1"x8unc	F16	46 : 1	137 *302*	178 *392*
450 *18*	1154 *45.43*	375 *14.76*	385 *15.16*	394 *15.51*	230 *9.06*	100 *3.94*	417 *16.42*	310 *12.20*	106 *4.17*	362 *14.25*	42 *1.65*	124 *4.88*	15x12-85L *0.59x0.47-3.35L*	114 *4.50*	577.9 *22.75*	-	16-1 1/8"x8un	F16	46 : 1	151 *333*	208 *459*
500 *20*	1228 *48.35*	418 *16.46*	416 *16.38*	394 *15.51*	230 *9.06*	100 *3.94*	468 *18.43*	310 *12.20*	106 *4.17*	362 *14.25*	55 *2.16*	124 *4.88*	15x12-85L *0.59x0.47-3.35L*	127 *5.0*	635.0 *25.0*	-	20-1 1/8"x8un	F16	46 : 1	207 *456*	239 *527*
550 *22*	1324 *52.14*	462 *18.19*	450 *17.72*	412 *16.22*	250 *9.84*	110 *4.33*	511 *20.12*	360 *14.17*	137 *5.39*	406 *15.98*	65 *2.60*	142 *5.59*	20x12-100L *0.79x0.47-3.94L*	154 *6.06*	692.2 *27.25*	-	20-1 1/4"x8un	F25	64 : 1	280 *617*	360 *794*
600 *24*	1384 *54.5*	492 *19.37*	480 *18.90*	412 *16.22*	250 *9.84*	110 *4.33*	549 *21.61*	360 *14.17*	137 *5.39*	406 *15.98*	65 *2.60*	142 *5.59*	20x12-100L *0.79x0.47-3.94L*	154 *6.06*	749.3 *29.5*	-	20-1 1/4"x8un	F25	64 : 1	331 *730*	435 *959*

UNICOM	HIGHSEAL VALVES PARTS LIST	Valve Type ; MTD

Part No.	Designation		Specification	Material ASTM
100	Valve Body	103	316 Stainless Steel	A351 Gr CF8M
110	Insert Ring	113	316 Stainless Steel	A240 Tp 316
200	Disc	201	304 Stainless Steel	A351 Gr CF8
		202	304L Stainless Steel	A351 Gr CF3
		203	316 Stainless Steel	A351 Gr CF8M
		204	316L Stainless Steel	A351 Gr CF3M
		205	13 Cr	A217 Gr CA15
		208	304 Stainless Steel & Electroless Nickel Plate	A351 Gr CF8 & ENP
		209	304L Stainless Steel & Electroless Nickel Plate	A351 Gr CF3 & ENP
		210	304 Stainless Steel & Hard Facing	A351 Gr CF8 & STELLITE
		211	304L Stainless Steel & Hard Facing	A351 Gr CF3 & STELLITE
		212	316 Stainless Steel & Electroless Nickel Plate	A351 Gr CF8M & ENP
		213	316L Stainless Steel & Electroless Nickel Plate	A351 Gr CF3M & ENP
		214	316 Stainless Steel & Hard Facing	A351 Gr CF8M & STELLITE
		215	316L Stainless Steel & Hard Facing	A351 Gr CF3M & STELLITE
220	Disc Pin	221	316 Stainless Steel	A276 Tp 316
320 ◢	Metal Seat	321	304 Stainless Steel	A240 Tp 304
		322	304L Stainless Steel	A240 Tp 304L
		323	316 Stainless Steel	A240 Tp 316
		324	316L Stainless Steel	A240 Tp 316L
		325	Inconel	INCONEL
400	Shaft	401	304 Stainless Steel	A276 Tp 304
		402	304L Stainless Steel	A276 Tp 304L
		403	316 Stainless Steel	A276 Tp 316
		404	316L Stainless Steel	A276 Tp 316L
		405	630 Stainless Steel	17-4PH
		406	Monel	MONEL
410	Shaft Bearing	412	316 Stainless Steel	A240 Tp 316
420	Shaft Retainer	421	316 Stainless Steel	A276 Tp 316
430	Shaft Spacer	431	316 Stainless Steel	A240 Tp 316
510	Gland Flange	511	304 Stainless Steel	A240 Tp 304
520	Packing Gland	521	316 Stainless Steel	A276 Tp 316
530 ◢	Gland Packing	531	Grafoil	GRAFOIL
		532	Teflon	PTFE
		533	Reinforced Teflon	R.TFE
540	Packing Retainer	541	316 Stainless Steel	A276 Tp 316
610	Bottom Plug	613	316 Stainless Steel	A276 Tp 316
620 ◢	Bottom Packing	621	Grafoil	GRAFOIL
		622	Teflon	PTFE
		623	Reinforced Teflon	R.TFE
710	Stud Bolt	712	316 Stainless Steel	A193 Gr B8M
720	Hex. Nut	722	316 Stainless Steel	A194 Gr 8M
730	Spring Washer	732	316 Stainless Steel	A167 Tp 316
740	Hex. Bolt	742	316 Stainless Steel	A193 Gr B8M
750	Spring Washer	752	316 Stainless Steel	A167 Tp 316
760	Wrench Bolt	762	316 Stainless Steel	A193 Gr B8M
800	Parallel Key		Carbon Steel	AISI 1045

◢ Recommend Spare Parts

UNICOM	HIGHSEAL VALVES PARTS LIST	Valve Type ; GTD

Part No.	Designation		Specification	Material ASTM
100	Valve Body	103	316 Stainless Steel	A351 Gr CF8M
110	Insert Ring	113	316 Stainless Steel	A240 Tp 316
200	Disc	201	304 Stainless Steel	A351 Gr CF8
		202	304L Stainless Steel	A351 Gr CF3
		203	316 Stainless Steel	A351 Gr CF8M
		204	316L Stainless Steel	A351 Gr CF3M
		205	13 Cr	A217 Gr CA15
		206	Monel	MONEL
		207	Aluminum Bronze	B148
220	Disc Pin	221	316 Stainless Steel	A276 Tp 316
310 ◢	Soft Seat	311	Teflon	PTFE
		312	Reinforced Teflon	R.TFE
400	Shaft	401	304 Stainless Steel	A276 Tp 304
		402	304L Stainless Steel	A276 Tp 304L
		403	316 Stainless Steel	A276 Tp 316
		404	316L Stainless Steel	A276 Tp 316L
		405	630 Stainless Steel	17-4PH
		406	Monel	MONEL
410	Shaft Bearing	411	316 Stainless Steel & Reinforced Teflon	A240 Tp 316 & R.TFE
420	Shaft Retainer	421	316 Stainless Steel	A276 Tp 316
430	Shaft Spacer	431	316 Stainless Steel	A240 Tp 316
510	Gland Flange	511	304 Stainless Steel	A240 Tp 304
520	Packing Gland	521	316 Stainless Steel	A276 Tp 316
530 ◢	Gland Packing	531	Grafoil	GRAFOIL
		532	Teflon	PTFE
		533	Reinforced Teflon	R.TFE
540	Packing Retainer	541	316 Stainless Steel	A276 Tp 316
610	Bottom Plug	613	316 Stainless Steel	A276 Tp 316
620 ◢	Bottom Packing	621	Grafoil	GRAFOIL
		622	Teflon	PTFE
		623	Reinforced Teflon	R.TFE
710	Stud Bolt	712	316 Stainless Steel	A193 Gr B8M
720	Hex. Nut	722	316 Stainless Steel	A194 Gr 8M
730	Spring Washer	732	316 Stainless Steel	A167 Tp 316
740	Hex. Bolt	742	316 Stainless Steel	A193 Gr B8M
750	Spring Washer	752	316 Stainless Steel	A167 Tp 316
760	Wrench Bolt	762	316 Stainless Steel	A193 Gr B8M
800	Parallel Key		Carbon Steel	AISI 1045

◢ Recommend Spare Parts