

## General

The DY products have solutions to your requirements through the conception of which provides the appropriate answer to various applications.

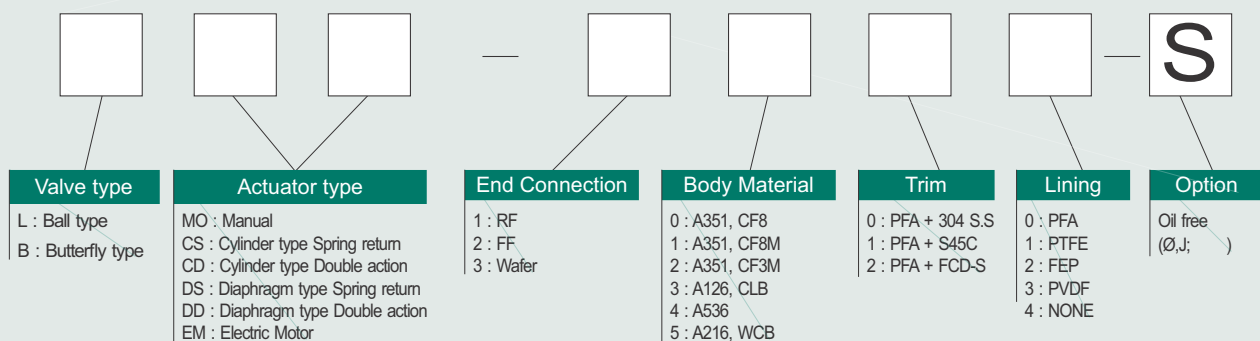
The DY valves have proved the tightness in accordance with the clean Air Act.

- One - piece ball with stem or floating of PFA or FEP. non-abrasive ball.
- Cavity - free TF Ball available.
- Live loading packing system.
- Full lining 3mm PFA.

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## Model Numbering System

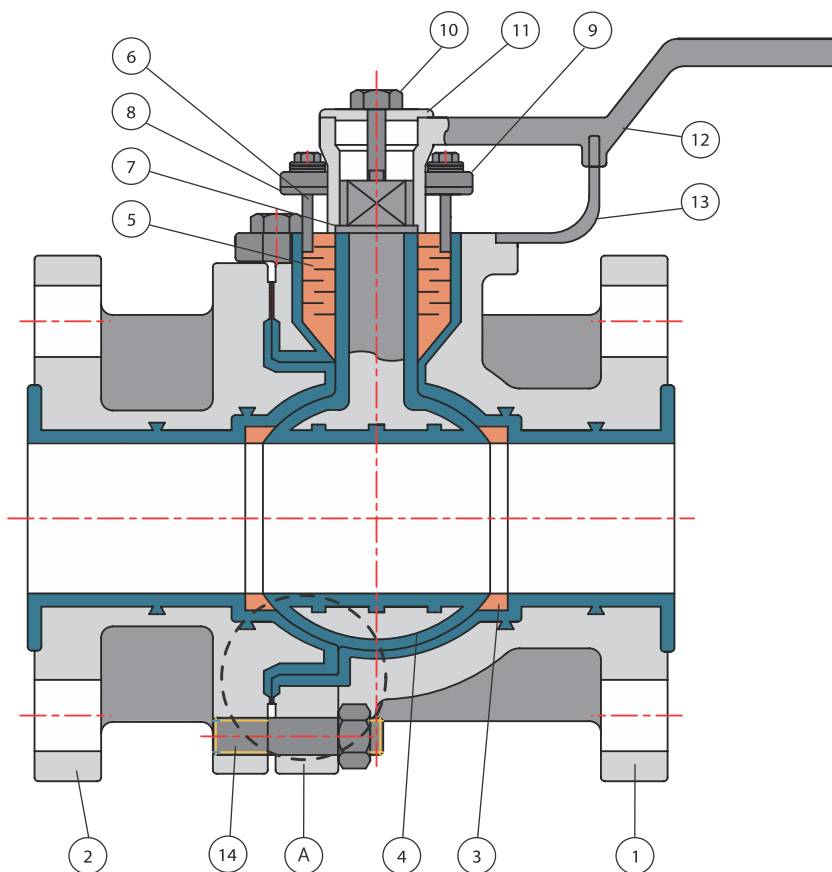


## Specification

Body Size	Ø , 1 , 1-1/2 , 2 , 3 , 4 , 6 other sizes are option.
Body Type	Two Piece - Body
Pressure Rating	ANSI 150LB, JIS 10K
End Connection	Flanged (RF)
Ball Design	Floating Ball Full Port V-Noth Ball Reducer Port.
Packing Box	Live loading Packing System
Seat Leakage	ANSI B16.104, FCI 70-2 Class V
Characteristic	Quick-opening , Modified. %
Standard Materials	
Body	A351, CF8+PFA Lined (Option / FEP, PVDF)
Ball	A351, CF8+PFA Lined (Option / FEP, PVDF)
Actuator	<ul style="list-style-type: none"> <li>I Manual Handle</li> <li>I Spring return</li> <li>I Double action</li> <li>I Electric Motor</li> </ul>
Options	Positioner, Solenoid Valve. Limit Switch, Air Set, Others.
Note	Actuator and Accessories are subject to change according Buyers' specification

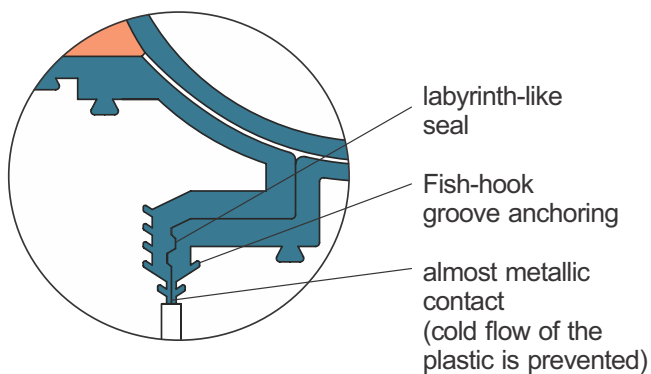


# Body Material & Applications

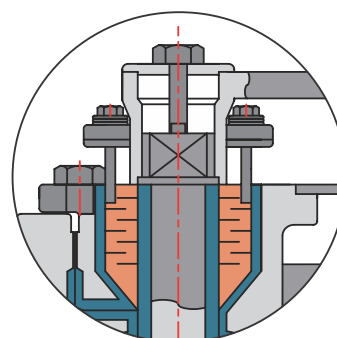


I One - piece ball / Stem

“ ”



labyrinth-like seal  
Fish-hook groove anchoring  
almost metallic contact (cold flow of the plastic is prevented)



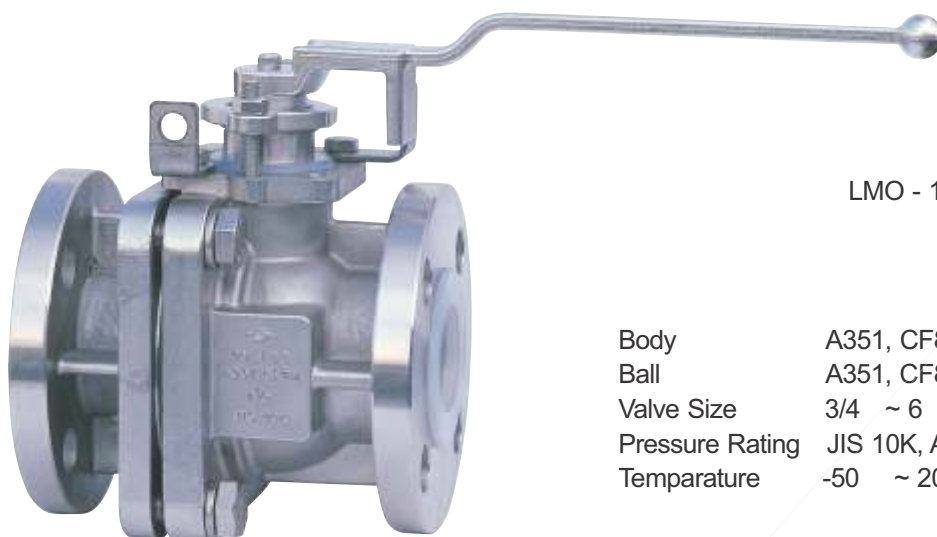
one set of bellows packing ring provide a tight pressure-assisted stem seal

## Characteristics

14	Hex. bolt & nuts		Stainless steel	4	
13	Handle stop		Stainless steel	1	
12	Handle		A351, CF8	1	
11	Washer		Stainless steel	1	
10	Hex. bolt		Stainless steel	1	
9	Packing gland follower		Stainless steel	1	
8	Spring gland follower		Stainless steel	1	
7	Grounding spring washer		Stainless steel	1	
6	Thrust ring		Stainless steel	1	
5	Packing insert		PTFE	1	
4	Ball/Stem	Lined	PFA (211SH, 440 HP-J)	1	
		Shell	A351, CF8	1	
3	Seat rings		PTFE	2	
2	End piece/Lined	Lined	PFA (211SH, 440 HP-J)	1	
		Shell	A351, CF8	1	
1	Body/Lined	Lined	PFA (211SH, 440 HP-J)	1	
		Shell	A351, CF8	1	
No.	Description		Material	Q'ty	Remark

- Ball universally chemically resistant of PFA, non-abrasive ball of  $Al_2O_3$  on request.
- Permanent tightness of the new inner flange connection.
  - : Tight even during frequent cycles of hot and cold effected by an almost metal to metal flange contact in the circumference area close to the flange bolting
  - : Full lining thickness in the sealing zone provides security against permeating media.
  - : Labyrinth-like seal with increased surface loading by means of moulded sealing lips.
- Live loading packing system
  - : As to the design of the seat rings, A permanent tightness is ensured in the seat covering the entire pressure/temperature range incl.
  - : vacuum live loaded spring washers provide constant, uniform packing pressure.
- PTFE Cushion-Seatings and easily replaceable.
- Full port design. / Option-V-nootch Redacer Port Design.

## Engineering Information



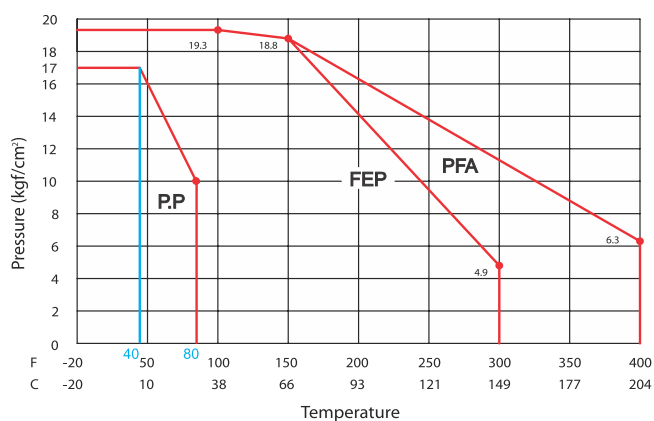
LMO - 1000

Body A351, CF8+PFA Lined  
 Ball A351, CF8+PFA Lined  
 Valve Size 3/4 ~ 6  
 Pressure Rating JIS 10K, ANSI 150LB  
 Temperature -50 ~ 200

### Torques Characteristics

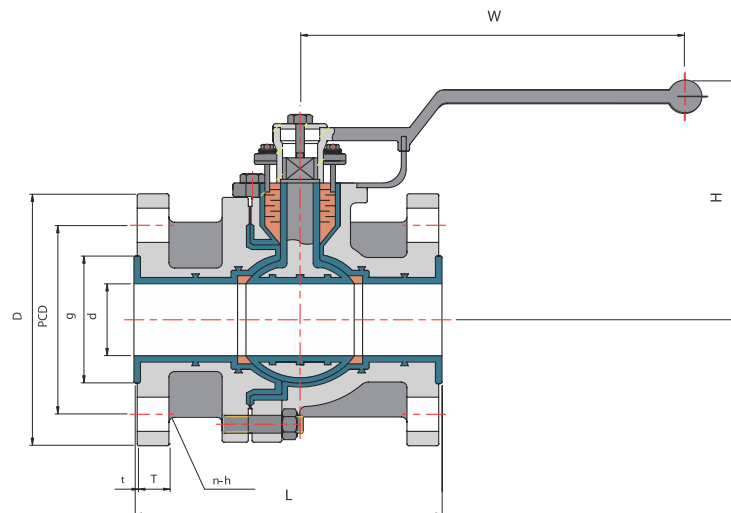
Size		$\Delta P$				max. adm.	max. adm.
mm	inch	3 bar	6 bar	10 bar	16 bar		
20A	3/4B	8	8	8	10	70	34
25A	1B	12	12	12	12	70	34
40A	1 1/2B	20	20	20	25	225	80
50A	2B	25	25	25	30	225	120
80A	3B	60	60	65	80	500	250
100A	4B	80	80	90	170	500	350
150A	6B	200	250	350	-	2200	1200

### Pressure - Temperature Ratings



Size	20A	25A	40A	50A	80A	100A	125A	150A	200A
CV	20	36	88	233	362	934	1459	3268	3734
KV	17.5	31	75	200	310	800	1250	2800	3200

## Dimensional Chart



Unit : mm

Size		L	H	W	d	Flange ( JIS 10K.RF )						Flange (ANSI 150LB. RF)					
mm	inch					D	PCD	g	n-h	T	t	D	PCD	g	n-h	T	t
20A	3/4B	150	120	170	20	100	75	50	4-15	14	3	98.4	69.8	50	4-15.9	11.1	3
25A	1B	127	120	170	24.5	125	90	51	4-19	14	3	107.9	79.4	51	4-15.9	11.1	3
40A	1 1/2B	165	145	250	38	140	105	73	4-19	16	3	127.0	98.4	73	4-15.9	14.3	3
50A	2B	178	145	250	47.5	155	120	92	4-19	16	3	152.4	120.6	92	4-19.0	15.9	3
80A	3B	203	180	300	76	185	150	127	8-19	18	4	190.5	152.4	127	4-19.5	19.1	4
100A	4B	229	195	300	96	210	175	157	8-19	18	4	228.6	190.5	157	8-19.5	23.8	4
150A	6B	267	265	500	145	280	240	216	8-23	22	4	279.4	241.3	216	8-22.2	25.4	4

### Installation and connecting dimensions

- face to face dimensions are ANSI B 16.10 and Flange connections are ANSI B 16.5 and JIS B 2210
- Valve prepared for quarter-turn actuators according to ISO 5211 : bracket of stainless steel or galvanised steel, coupling of stainless steel. Suited for all popular actuator

Extended Stem



Lockable Lever



Limit Switch Installed



Elvested Lever



Jacket Body



Double Cylinder Actuator

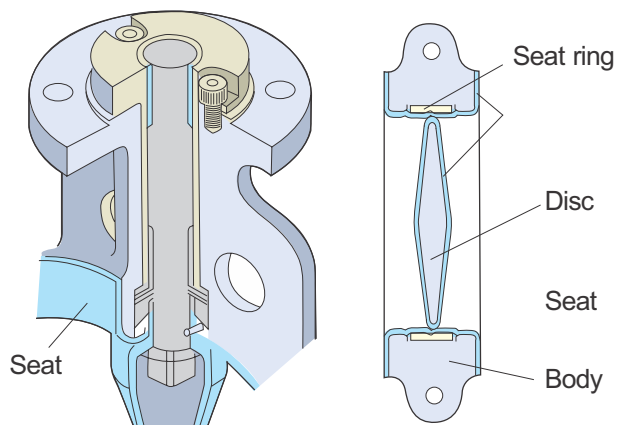


## High Corrosion Resistance and Durability

No other materials are better performance than Teflon(PTFE) resin in keeping high corrosion resistance and preventing the adhesion of fluid. This resin is ideal for acids, gases, and food in the form of fluid. Furthermore, the unique internal structure prevents residual fluid, thus maintaining its durability and cleanliness is far better than conventional valves.

Valves connected to pipes using for pharmaceutical, food, and industrial applications that handle acid and alkali solvents are required to have more corrosion resistance, chemical resistance, and sealing performance than other valves. The entire surface of DYC s teflon butterfly valve, which comes in contact with fluid, uses a terafluoroethylene perfluoroalkoxy(PTFE) resin. This valve demonstrates stable performance in a wide variety of fields, for pure water equipment as well as pharmaceutical, food, and chemical applications.

### Teflon (PTFE) BUTTERFLY VALVES

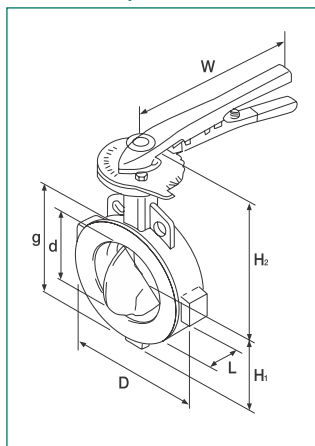


BOO3411 - Manual Operation  
BCS3411 - Spring return Operation  
BCD3411 - Double action Operation  
BEM3411 - Electric Motor Operation

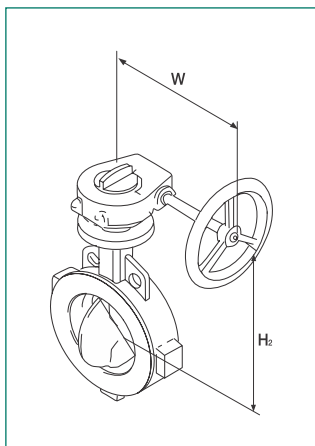
Body	FCD-S
Disc	PFA+S45C
Seat	PTFE
Actuators	Lever-Operated, Worm-Gear Pneumatic-Cylinder, Electric-Motor
Valve Size	50A ~ 900A (2B ~ 36B)
Pressure Rating	JIS 10K, ANSI 150LB
Temperature	-40 ~ 150
Max.service Pressure	Fluid 0.7MPa / Gases 0.2Mpa
Hydrostatic Shell Test	Fluid 0.7MPa / Gases 0.2Mpa
Hydrostatic Seat Test	1.0Mpa

## Dimensional Chart

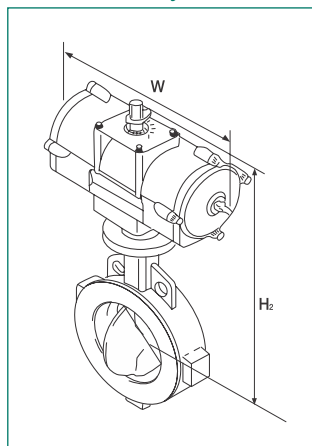
### I Lever-Operated



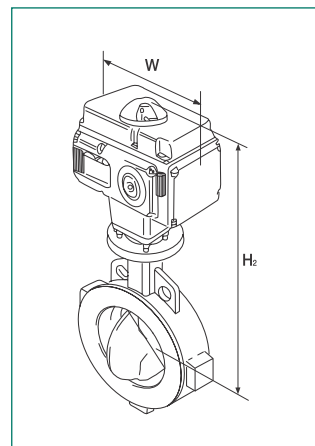
### I Worm-Gear



### I Pneumatic-Cylinder



### I Electric-Motor



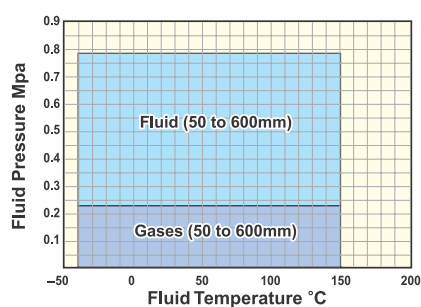
(unit : mm, weight : kg)

size		L	d	g	H <sub>1</sub>	D	Lever-Operatde			Worm-Gear			Pneumatic-Cylinder			Electric-Motor		
mm	inch						H <sub>2</sub>	W	weight	H <sub>2</sub>	W	weight	H <sub>2</sub>	W	weight	H <sub>2</sub>	W	weight
50	2	43	59	100	58	112	151	160	3.2	192	141	6.0	303	236	6.5	334	180	8.5
65	2 1/2	43	59	100	58	112	151	160	3.2	192	141	6.0	303	236	6.5	334	180	8.5
80	3	46	78	130	80	150	166	200	5.3	207	141	8.8	351	276	8.9	351	247	15.0
100	4	52	98	155	95	190	196	260	7.7	231	182	9.9	374	276	10.9	374	247	17.0
125	5	56	123	185	100	220	214	360	11.1	243	182	11.9	417	342	15.7	386	247	19.0
150	6	56	148	215	125	248	245	360	16.0	289	211	22.0	467	342	20.5	436	247	26.0
200	8	60	194	265	150	298	—	—	—	312	211	27.0	513	420	28.0	475	275	34.0
250	10	68	240	325	211	370	—	—	—	408.5	255	43.0	637	506	43.5	552	275	41.0
300	12	78	296	370	239	414	—	—	—	408.5	255	50.0	665	506	50.5	643	345	61.0
350	14	92	328	415	291	476	—	—	—	521	320	91.0	※	※	※	※	※	※
400	16	102	378	475	317	538	—	—	—	547	320	109.0	※	※	※	※	※	※
450	18	114	428	530	342	594	—	—	—	600	331	163.0	※	※	※	※	※	※
500	20	127	478	585	374	648	—	—	—	640	331	190.0	※	※	※	※	※	※
600	24	154	578	690	466	752	—	—	—	710	392	292.0	※	※	※	※	※	※
700	28	165	683	780	482	930	—	—	—	—	—	—	※	※	※	※	※	※
750	30	190	728	840	489	970	—	—	—	—	—	—	※	※	※	※	※	※
800	32	190	780	887	558	1060	—	—	—	—	—	—	※	※	※	※	※	※
900	36	203	879	1000	612	1160	—	—	—	—	—	—	※	※	※	※	※	※

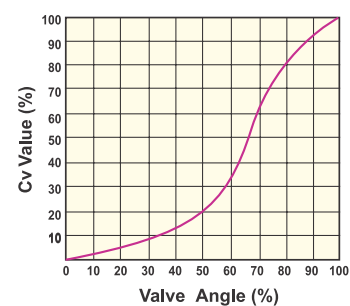
※ Please contact us for sizes of 350 mm or more.



### Temperature and Pressure Ratings



### Flow Characteristics





## Pneumatic Actuator



### C-series

Type	Pneumatic cylinder actuator (scotch yoke type)
Action	Double action, Spring return
Pressure input	2.8 ~ 10 bar



### D-series

Type	Spring-diaphragm rotary actuator
Action	Spring return
Pressure input	1.3 ~ 7 bar

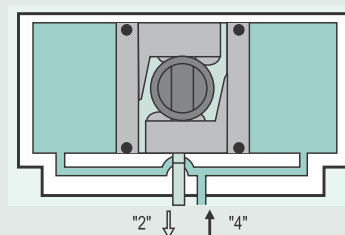
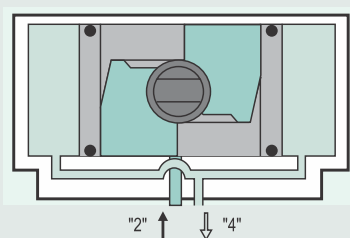


### C-series

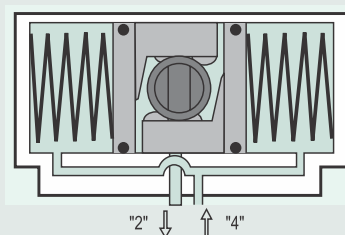
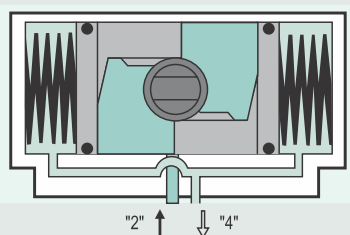
Type	Pneumatic cylinder actuator (rack & pinion type)
Action	Double action, Spring return
Pressure input	1~7bar
Material	Aluminum, Stainless Steel, Nylon

The standard rotation is clockwise to close, counter-clockwise rotation is achieved when port 2 is pressurised. For actuator marked LF the rotation is counter-clockwise to close, clockwise rotation is obtained when port 2 is pressurised.

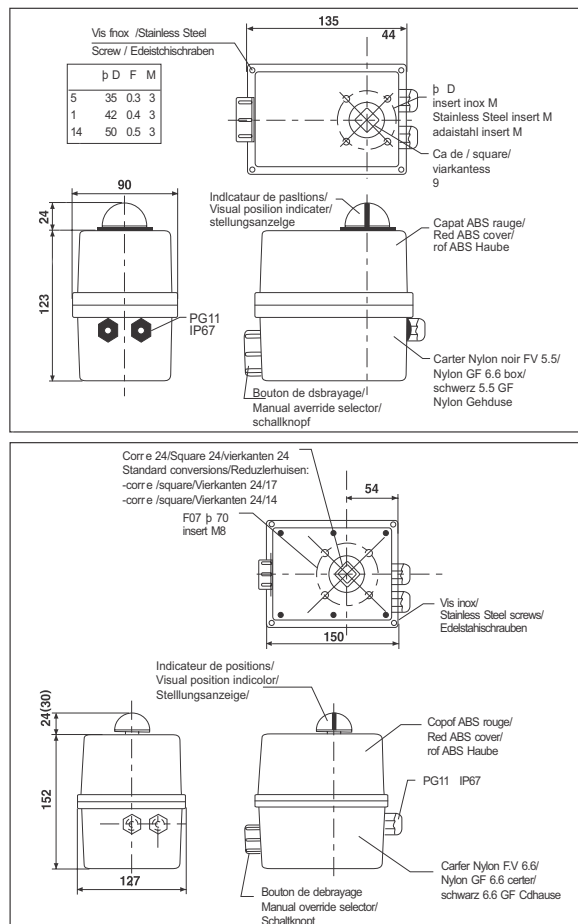
### Double Acting operation function (standard rotation) TOP View:



### Single Acting operation function (standard rotation) TOP View:



## Electric Motor Actuator



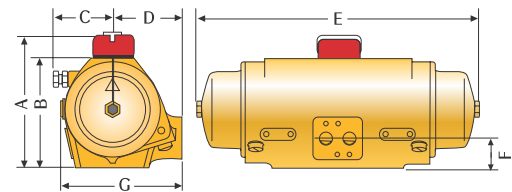
TYPE			ER10	ER20	ER30	ER45	ER60	ER100
Couple/	Torque/	Drehmoment	10Nm	20Nm	35Nm	45Nm	60Nm	100Nm
Tension/	Voltage/	Spannung	24V AC/DC					
Vitesse/	90° travel time/	Stellzeit	5s	5s	10s	10s	20s	30s
Puissance/	Power consupcion/	Leistungsaufnahme	30W	30W	30W	30W	30W	30W
Tension/	Voltage/	Spannung	220V/110V AC/DC					
Vitesse/	90° travel time/	Stellzeit 50Hz(60Hz=X0.8)	10s 25s*	20s 90s*	35s 90s*	20s 90s*	20s 90s*	20s 35s 160s*
Puissance/	Power consupcion/	Leistungsaufnahme	14W 9W	14W 9W	24W 11W	24W 11W	24W 11W	38W 24W 11W
Carré/	Square/	Vierkanten	11	11/14	14	24**	24**	24**
Fixation/	Fixation/	Anschluß	F04	F04/F05	F05	F07	F07	F07
Fin de course/	Limit switch/	Endschalter	4	4	4	4	4	4
Cde manuelle/	Manual override/	Handnotbetätigung	Axe/Shaft/Achse					
Angle de manoeuvre/	Angle of rotation/	Schwenkwinkel	90° /180°					
Duree sous tension/	Duty rating/	Betriebsart	30%(50% en 220V)					
Protection/	Protection/	Schutzart	IP65/NEMA4					
Temperature/	Temperature/	Zul. Umgebungst	-10 °C +55 °C					
Poids/	Weight/	Gewicht	1.5KG			3KG		

## Envelope Dimensions Output Torques (DA)

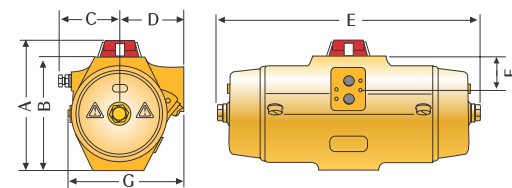
Model	40Psi	50Psi	60Psi	70Psi	80Psi	90Psi	100Psi	120Psi
XL26	83	104	125	146	167	188	209	250
XL71	209	261	313	365	417	469	521	626
XL131	392	490	589	687	785	883	981	1177
XL186	528	660	791	923	1055	1187	1319	1583
XL221	735	919	1103	1286	1470	1654	1838	2205
XL281	879	1099	1319	1539	1759	1979	2199	2638
XL426	1282	1603	1924	2244	2565	2886	3206	3847
XL681	2090	2613	3136	3658	4181	4704	5226	6271
XL1126	3500	4375	5250	6125	7000	7875	8750	10500
XL1371	4275	5344	6412	7481	8550	9619	10687	12825
XL2586	8075	10094	12112	14131	16150	18169	20188	24225
XL4581	14250	17812	21375	24938	28500	32063	35625	

Actuator torques are guaranteed minimum torque values. Hytork recommends that the valve manufacturer supply the maximum required torque values(Including any adjustments or suggested safety factors for valve manufacturer must identify at witch position(s) and direction(s) of rotation(Counter Clock Wise or Colck Wise)these maximum requirements occur.

Model	XL26	XL71	XL131	XL186	XL221
Dimensions					
A	3.82"	4.53"	5.16"	5.39"	6.01"
B	3.03"	3.74"	4.37"	4.61"	5.24"
C	1.77"	2.24"	2.52"	2.80"	3.07"
D	2.05"	2.36"	2.76"	2.83"	3.19"
E	6.50"	8.73"	11.54"	13.06"	13.77"
F	1.14"	1.14"	1.18"	1.18"	1.30"
G	3.39"	4.02"	4.76"	4.96"	5.55"

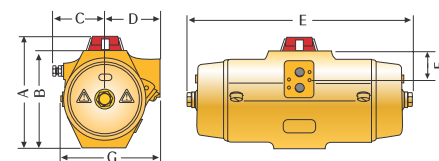


Model	XL281	XL426	XL681
Dimensions			
A	6.93"	6.65"	8.03"
B	5.98"	5.79"	7.09"
C	3.19"	3.39"	3.70"
D	3.39"	3.46"	3.78"
E	13.70"	18.19"	22.91"
F	1.73"	1.65"	2.05"
G	6.02"	6.18"	6.85"

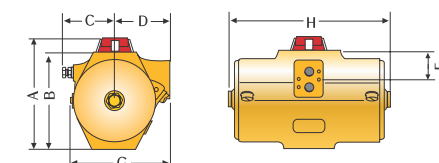


Model	XL1126	XL1371	XL2586	XL4581
Dimensions				
A	9.21"	9.72"	11.50"	15.28"
B	7.87"	8.46"	10.24"	14.02"
C	5.20"	5.08"	N/A	N/A
D	4.25"	4.57"	5.16"	6.30"
E	25.51"	26.34"	33.94"	34.80"
F	2.20"	1.97"	1.93"	2.99"
G	7.83"	8.50"	9.96"	12.64"
H	15.59"	16.02"	18.39"	20.28"

Spring Return Actuators



Double Acting Actuators



## Envelope Dimensions Output Torques (SR)

Spring Return Actuators Torque Data (Pressures in psig and torques in inch pounds.)

Model	Spring Rating	Torques from Springs		40		50		60		70		80		90		100		120	
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
<b>XL26</b>	S40	53	32	52	31	73	52	94	73	115	94	135	114	156	135	177	156	219	198
	S60	79	47	-	-	57	26	78	46	99	67	120	88	141	109	161	130	203	172
	S80	105	63	-	-	-	-	62	20	83	41	104	62	125	83	146	104	187	145
	S1C	131	79	-	-	-	-	-	-	-	-	88	36	109	57	130	77	172	119
<b>XL71</b>	S40	131	79	130	77	182	130	234	182	286	234	338	286	391	338	443	390	547	495
	S60	197	118	-	-	143	64	195	116	247	168	299	220	351	273	403	325	508	429
	S80	263	158	-	-	-	-	155	50	208	103	260	155	312	207	364	259	468	363
	S1C	328	197	-	-	-	-	-	-	-	-	220	89	273	141	325	193	429	298
<b>XL131</b>	S40	247	148	244	146	342	244	440	342	539	440	637	538	735	636	833	734	1029	930
	S60	370	222	-	-	268	120	366	218	465	316	563	414	661	513	759	611	955	807
	S80	494	296	-	-	-	-	292	95	390	193	489	291	587	389	685	487	881	683
	S1C	617	370	-	-	-	-	-	-	-	-	414	168	513	266	611	364	807	560
<b>XL186</b>	S40	331	198	329	197	461	329	593	461	725	593	857	725	989	857	1121	989	1385	1253
	S60	495	298	-	-	362	164	494	296	626	428	757	560	889	692	1021	824	1285	1088
	S80	661	397	-	-	-	-	395	130	527	262	659	394	791	526	923	658	1186	922
	S1C	827	495	-	-	-	-	-	-	-	-	560	229	692	361	824	492	1088	756
<b>XL221</b>	S40	463	278	458	273	641	456	825	640	1009	824	1193	1008	1377	1192	1560	1375	1928	1743
	S60	694	416	-	-	503	225	686	409	870	593	1054	777	1238	960	1422	1144	1789	1512
	S80	925	555	-	-	-	-	548	178	731	361	915	545	1099	729	1283	913	1650	1280
	S1C	1156	694	-	-	-	-	-	-	-	-	777	314	960	498	1144	682	1512	1049
<b>XL281</b>	S40	567	331	548	313	768	532	988	752	1208	972	1428	1192	1648	1412	1867	1632	2307	2072
	S60	850	497	-	-	602	249	822	469	1042	689	1262	909	1482	1129	1702	1348	2142	1788
	S80	1134	663	-	-	-	-	657	185	877	405	1096	625	1316	845	1536	1065	1976	1505
	S1C	1417	828	-	-	-	-	-	-	-	-	931	342	1151	562	1370	782	1810	1221
<b>XL426</b>	S40	831	498	784	452	1105	772	1425	1093	1746	1413	2067	1734	2387	2055	2708	2375	3349	3017
	S60	1246	748	-	-	855	357	1176	677	1497	998	1817	1319	2138	1639	2459	1960	3100	2601
	S80	1662	997	-	-	-	-	927	262	1247	583	1568	903	1889	1224	2209	1544	2851	2186
	S1C	2077	1246	-	-	-	-	-	-	-	-	1319	488	1639	808	1960	1129	2601	1770
<b>XL681 SR</b>	S40	1337	802	1289	754	1181	1277	2334	1799	2856	2322	3379	2844	3902	3367	4424	3890	5470	4935
	S60	2005	1203	-	-	1410	608	1933	1131	2455	1654	2978	2176	3501	2699	4023	3221	5069	4267
	S80	2673	1604	-	-	-	-	1535	463	2055	985	2577	1508	3100	2031	3622	2553	4668	3598
	S1C	3341	2005	-	-	-	-	-	-	-	-	2176	840	2699	1362	3221	1885	4267	2930
<b>XL1126</b>	S40	2189	1312	2188	1311	3063	2186	3938	3061	4813	3936	5688	4811	6563	5686	7438	6564	9188	8311
	S60	3283	1968	-	-	2407	1092	3282	1967	4157	2842	5032	3717	5907	4592	6782	5467	8532	7217
	S80	4377	2624	-	-	-	-	2626	873	3501	1748	4376	2623	5254	3498	6126	4373	7876	6123
	S1C	5472	3280	-	-	-	-	-	-	-	-	3720	1528	4595	2403	5470	3278	7220	5028
<b>XL1371</b>	S40	2694	1616	2659	1581	3728	2649	4979	3718	5865	4787	6934	5856	8003	6924	9072	7993	11209	10131
	S60	4041	2424	-	-	2920	1302	3989	2371	5057	3440	6126	4509	7195	5577	8264	6646	10401	8784
	S80	5389	3232	-	-	-	-	3181	1024	4249	2093	5318	3161	6387	4230	7456	5299	9593	7436
	S1C	6736	4040	-	-	-	-	-	-	-	-	4510	1814	5579	2883	6648	3952	8785	6089
<b>XL2586</b>	S40	5084	3051	5024	2991	7043	5010	9062	7028	11081	9047	13099	11066	15118	13085	17137	15103	21174	19141
	S60	7626	4576	-	-	5518	2468	7537	4486	9555	6505	11574	8524	13593	10543	15612	12561	19649	16599
	S80	10168	6101	-	-	-	-	6011	1944	8030	3963	10049	5982	12068	8001	14086	10019	18124	14057
	S1C	12710	7626	-	-	-	-	-	-	-	-	8524	3440	10542	5459	12561	7477	16599	11515
<b>XL4581</b>	S40	8996	5398	8852	5254	12415	8816	15977	12379	19540	15941	23102	19504	26665	23066	30227	26629		
	S60	13495	8097	-	-	9716	4318	13278	7880	16841	11443	20403	15005	23966	18568	27528	22130		
	S80	17993	10795	-	-	-	-	10580	3382	14142	6945	17705	10507	21267	14070	24830	17632		
	S1C	22491	13494	-	-	-	-	-	-	-	-	15006	6009	18568	9571	22131	13134		

Note : Actuator torques are guaranteed minimum torque values. Hytork recommends that the valve manufacturer supply the maximum required torque values (including any adjustments or suggested safety factors for valve service conditions or application). Additionally, the valve manufacturer must identify at which position(s) and

direction(s) of rotation (counter clock Wise or clock Wise) these maximum requirements occur.

Maximum working pressure:  
Models XL26-2586 120 psig  
XL4581 100 psig

Hytork XL Spring return actuators can be equipped with the additional spring sets S50, S70 and S90 for more accurate sizing. Please download data sheet D67 from [www.Hytork.com](http://www.Hytork.com) for the torque data, belonging to these additional spring sets.

S1C Spring Return  
For all fail closed butterfly valves and other spring return applications where 100 psig air is available, Hytorks optional S1C Spring Modules will often permit the selection of a smaller Hytork Actuator. Both space and cost savings can be achieved.

## Lining materials and methods.

The choice of lining materials and the method of lining are critical.



We begin with the purest fluorocarbon materials.

To assure lining integrity and maximum corrosion resistance, Tufline uses only PFA and FEP Fluorocarbons.

## PFA

PFA is the standard lining material for all Tufline Lined Accessories.

PFA is a fluoropolymer with extended temperature limits. It is a copolymer that combines the carbon-fluorine backbone of fluorocarbons with a perfluoroalkoxy side chain.

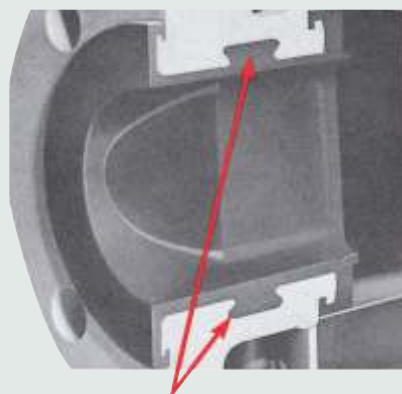
### PFA offers a variety of attributes and benefits:

- I Handles a wide range of fluids
- I Chemically inert
- I Heat resistant
- I Weather resistant
- I Stress-cracking resistant
- I Negligible moisture absorption
- I Better sealing and wear resistance between parts - because it is moldable and machinable to close tolerances.
- I PFA is a true thermoplastic and is melt processible, so it can be locked to the valve components. Blow-out or liner collapse are virtually impossible.

## FEP

As an option, the Tufline 45 Lined Ball Check Valve and the Sight Flow Indicator are available with a fluorinated ethylene-propylene (FEP) lining.

FEP offers benefits similar to those of PFA. The primary difference is the pressure/temperature ratings. PFA can be used in higher temperature applications than FEP. (See the chart on page 5)



### Lockde-in linings.

Tufline Lined Accessories have cast dovetail recesses and machined grooves that lock the lining to the body casting. Blow-out or liner collapse are virtually impossible.

## ■ Physical Properties

Property	PFA(perfluoroalkoxy)		FEP(Fluorinated ethylene-propylene)	
	ASTM method	Value	ASTM method	Value
Melting Point	---	570-590 F	---	487 - 540 F
Tensile strength @ 73 F	D638	3800 psi	D638	3000 psi
Elongation @ 73 F	D638	300%	D638	275%
Flexural modulus @ 73 F	D790	100,000 psi	D790	95,000 - 105,000 psi
Impact strength	D256	No break	D256	No break
Coefficient of liner thermal expansion per F (70 to 212 F)	D696	$6.7 \times 10$	D696 (-100 to 160F)	$4.6-5.8 \times 10$
Flammability	D635	Nonflammable	D635	Nonflammable
Weather and chemical resistance	---	Excellent	---	Excellent



#### Model No : LCD-1000

##### Standard Design Description :

##### Material

Body	A351, CF8+PFA Lining
Ball	A351, CF8+PFA Lining
Actuators	Cylinder & Diaphragm
Valve Size	3/4 ~ 6
Pressure Rating	JIS 10K, ANSI 150LB
Connection	Flanged
Temperature	-50 ~ 200



#### Model No : LCS-1000

##### Standard Design Description :

##### Material

Body	A351, CF8+PFA Lining
Ball	A351, CF8+PFA Lining
Actuators	Cylinder & Diaphragm
Valve Size	3/4 ~ 6
Pressure Rating	JIS 10K, ANSI 150LB
Connection	Flanged
Temperature	-50 ~ 200



#### Model No : LEM -1000

##### Standard Design Description :

##### Material

Body	A351, CF8+PFA Lining
Ball	A351, CF8+PFA Lining
Actuators	Electric Motor
Valve Size	3/4 ~ 6
Pressure Rating	JIS 10K
Connection	Flanged
Temperature	-50 ~ 200



#### Model No : BCS -3411

##### Standard Design Description :

##### Material

Body	A536
Disc	PFA + S45C
Seat	PTFE
Actuators	Cylinder & Diaphragm
Valve Size	2 ~ 24
Pressure Rating	JIS 10K, ANSI 150LB
Connection	Wafer, Flange, etc.
Temperature	-40 ~ 150

Note : Actuator and Accessories are subject to change according Buyers' specification