

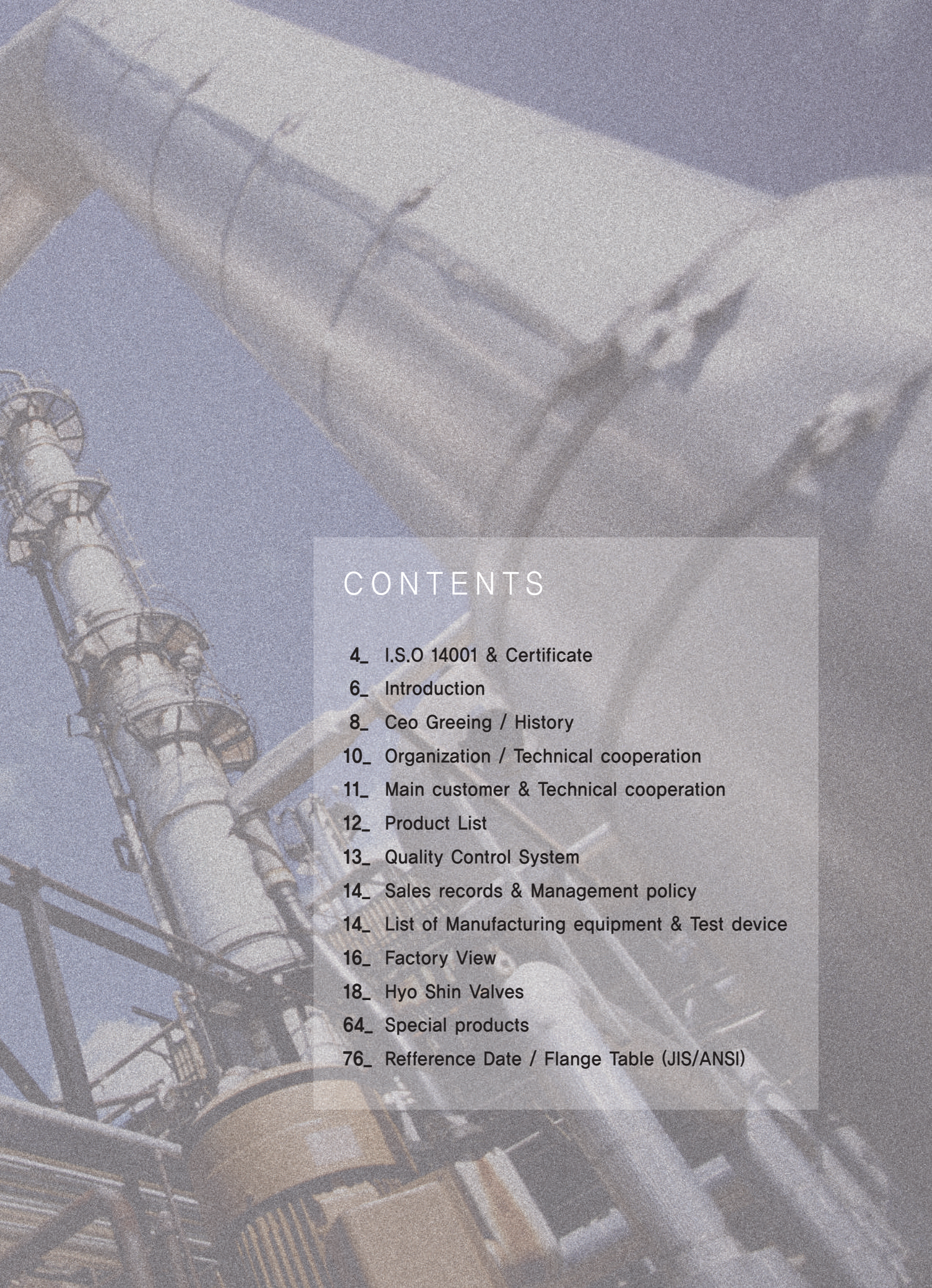
HYO SHIN

HSN HYO SHIN INDUSTRIAL CORP

The Best Partner For Your Business

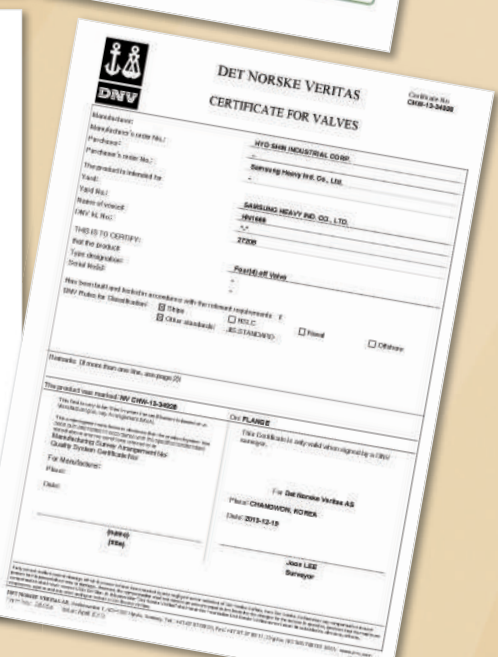
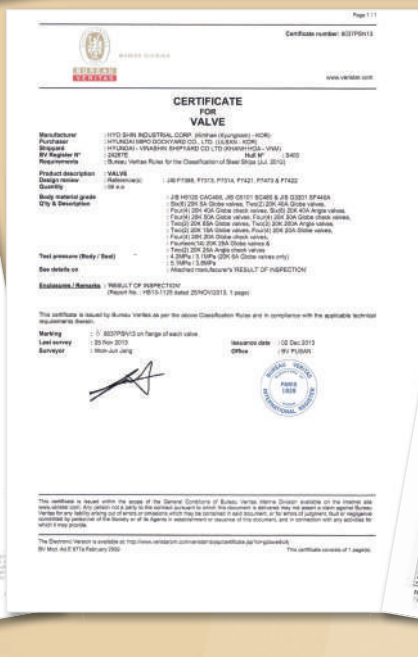
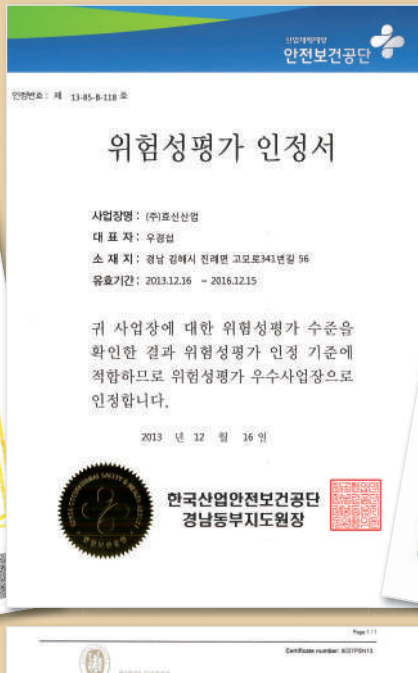
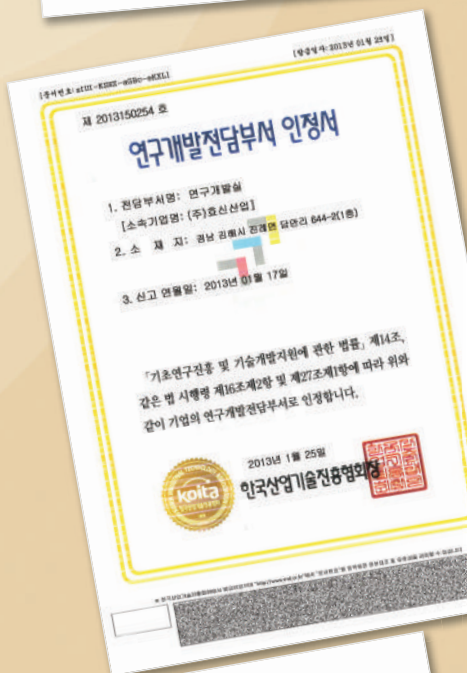
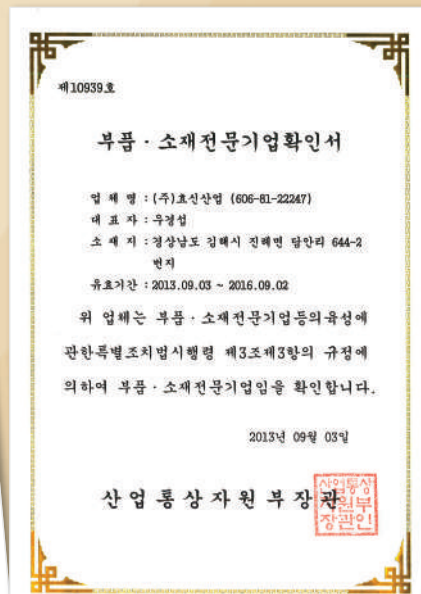
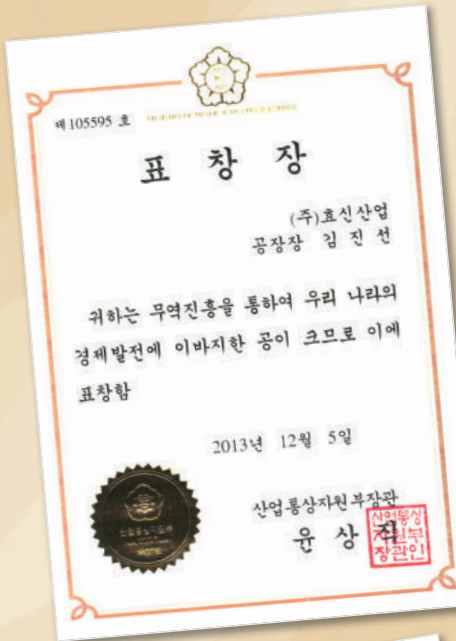




The background of the entire page is a photograph of industrial equipment, likely a refinery or chemical plant. It features large, vertical pipes with various valves, flanges, and ladders. The scene is somewhat hazy, with a blueish-grey tint, suggesting an overcast sky or a misty atmosphere. The pipes are made of metal and show signs of wear and scale.

CONTENTS

- 4_ I.S.O 14001 & Certificate
- 6_ Introduction
- 8_ Ceo Greeing / History
- 10_ Organization / Technical cooperation
- 11_ Main customer & Technical cooperation
- 12_ Product List
- 13_ Quality Control System
- 14_ Sales records & Management policy
- 14_ List of Manufacturing equipment & Test device
- 16_ Factory View
- 18_ Hyo Shin Valves
- 64_ Special products
- 76_ Refference Date / Flange Table (JIS/ANSI)



[illegible]

Introduction

- Name : HSN HYO SHIN INDUSTRIAL CORP
- Representative Director : Kyung Seob, Woo
- Registration No : 606-81-22247
- Foundation : 1997. 3. 3
- Employees : 43명
- Closing date : 12월 31일
- Main items : Marine Valves
- Capitals : 0.4 Billion (Korean Won)
- Business Type : Manufacturing
- Factory Space : Land: 3,105m², Building 1,650m²



■ Main Customer

- Domestic
- Hyundai Sam-Ho Heavy Industries Co., Ltd.
 - Han-Jin Heavy Industries Co., Ltd.
 - Sam-Sung Heavy Industries Co., Ltd.
 - STX Shipbuilding Co., Ltd.
 - Dae-San Engineering Co., Ltd.
 - Sun-Bo Heavy Industries Co., Ltd. & etc.

- Overseas
- KOKURYO MARIN VALVE CO.,LTD.
 - KEIKA SANGYO KAISAI, LTD.
 - BINGO VALVE CO.,LTD,
 - HINOMOTO BEN SHOJI CO.,LTD
 - MIKI VALVE ENGINEERING.
 - WORLD VALVE ENGINEERING.
 - W&O SUPPLY , STX OFFSHORE & SHIPBUILDING ..外





CEO : Woo Kyung Seop

1997

- 03 Foundation of "Hyo Shyn Industrail Corp.
- 03 Registered as the exporter through YOSHIDA VALVE CO., LTD. in Japan
- 09 Registered as the exporter through NEW PEITAI MACHINERY CO., LTD. in Taiwan

1998

- 10 Registered as the supplier for Hyundai Samho Heavy Ind. Co., Ltd.

1999

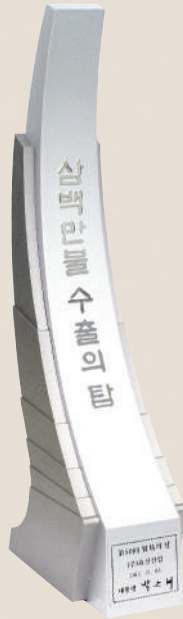
- 07 Convert into Hyo Shyn Industrial Co., Ltd.

2000

- 10 Moved to New factory

2001

- 11 Registered as the main supplier of Sunbo Heavy Industrial Co., Ltd.
- 11 Registered as the exporter through KOKURYO MARIN VALVE CO.,LTD. in Japan.



- 12 Award 3 Million Export Tower at 50th Trade Day
- 09 Parts Specialized Company
- 03 Registered as Technological Innovation Company(INNO-BIZ)
- 01 Found Research & Development Dept.

04 ISO 14001 : 2004 /
KS A 14001 : 2004

2014

2013

2011

- 11 Registered as cooperative supplier of Samsung Heavy Ind. Ltd.

2010

- 02 Registered as cooperative supplier of Daesan Engineering Co., Ltd.

2008

- 05 VIETNAM-VR Class approved factory

2007

2006

- 09 Registered as cooperative supplier of STX Shipbuilding Co., Ltd.
- 09 Merged "Bu-IL Industries Co.

2005

- 03 Registered as cooperative supplier of Hanjin Heavy Ind. Ltd.

2004

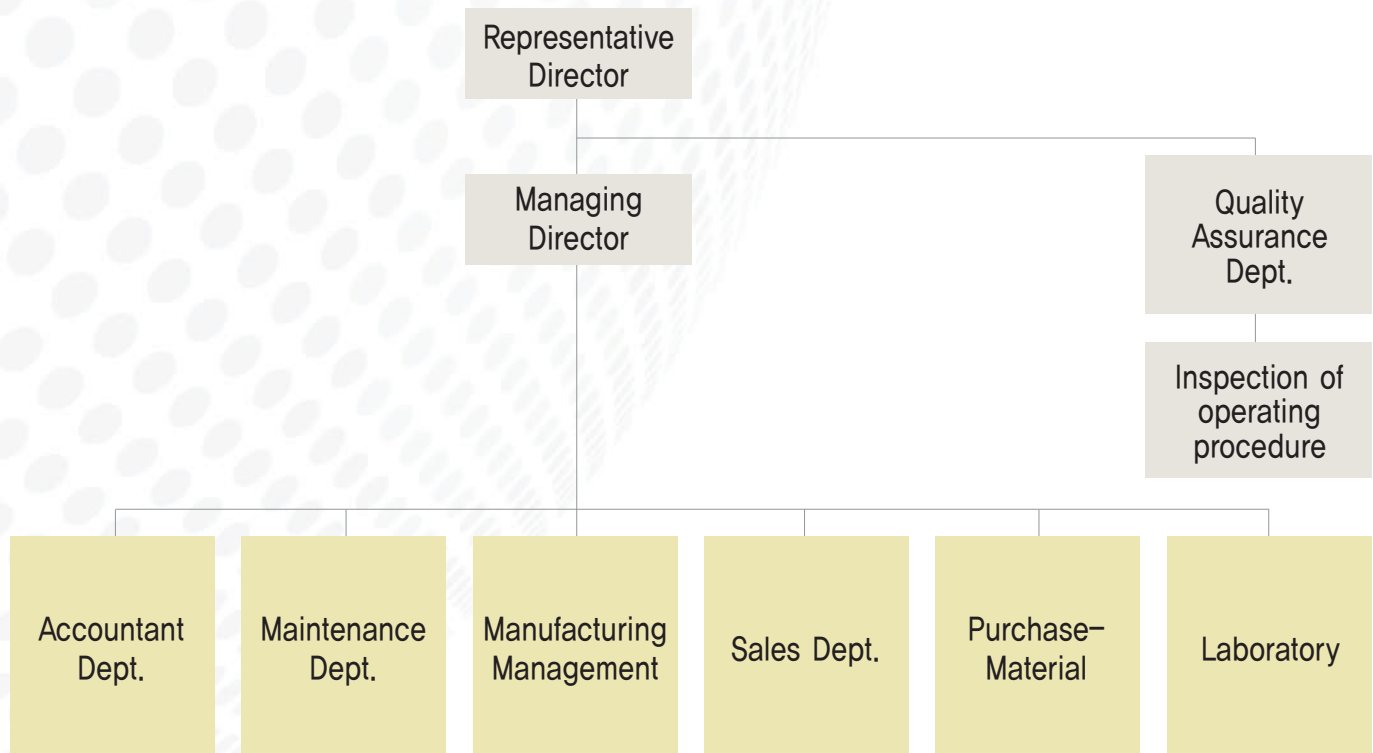
- 12 Registered as "CLEAN Factory" from Korea Occupational Safety & health Agency

2003

- 03 Obtain the Trading Registration No.

05 ISO 9001 : 2008

Organization



Technical cooperation

Registered as Korean agent & technical cooperor for marine valves from KOKURYO IRON WORKS.(JAPAN)

Registered as Korean agent & technical cooperor from KEIKA SANGYO KAISAI, LTD.(JAPAN)

Registered as Business Cooperor from MIKI VALVE ENGINEERING CO.,LTD.(JAPAN)
Supplied Inert Gas V/V for 10 ship sets to MITSUI Shipbuilding Co., Ltd.

Vietnam Register – Certificate of Manufacturer Approval

Found Research & Development Dept.

Parts Specialized Company

Registered as Technological Innovation Company (INNO – BIZ)

ISO 14001 : 2004 / KS A 14001 : 2004

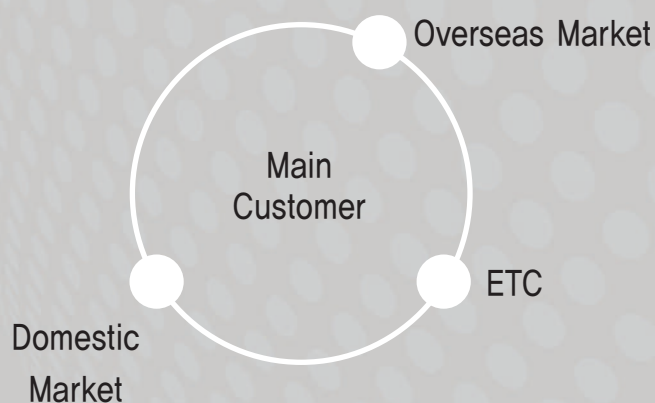
Main customer & Technical cooperation

▶ Overseas

BUYER	Remark	Class
KOKURYO MARIN VALVE CO.,LTD. (JAPAN)	SASEBO HEAVY INDUSTRY S753/7/8/9,S761/4/5/7 ~外..50 SHIPS	ABS, NK, LR, DNV, KR, GL, BV
KEIKA SANGYO KAISAI CO.,LTD. (JAPAN)	STOCK - SWING CH 5K50A ~外..10000 PCS / YEARS	ABS, NK, LR, DNV, KR, GL, BV
BINGO VELVE CO.,LTD. (JAPAN)	STOCK - SC GATE 16K80A ~外..10000 PCS / YEARS	ABS, NK, LR, DNV, KR, GL, BV
HINOMOTO BEN SHOJI CO.,LTD. (JAPAN)	STOCK - FC GATE 5K450A ~外..10000 PCS / YEARS	ABS, NK, LR, DNV, KR, GL, BV
MIKI VALVE ENGINEERING CO.,LTD.. (JAPAN)	MITSUI ENGINEERING & SHIPBUILDING CO.,LTD CHIBA WORK - CS1668/1680/1718~外..60 SHIPS	ABS, NK, LR DNV, KR, GL, BV
W&O SUPPLY (U.S.A/BELGIUM)	STOCK - 15000 PCS / YEARS	ABS
STX OFFSHOREV& SHIP BUILDING	CHINA - F1004 Noble 2nd Drillship Project	ABS
NAJIN CORP.	STOCK SHIP SDN BHD (YARD2)....外	BV

▶ Domestic

BUYER	Remark	Class
HYUNDAI SAM-HO HEAVY IND.	S276/8/9~339~外..35 SHIP SETS	ABS, NK, LR DNV, KR, GL, BV
HAN-JIN HEAVY IND' CO., LTD.	SN159/160/SN161/SN167.. ETC...20 SHIP SETS	ABS, NK, LR DNV, KR, GL, BV
SUN-BO HEAVY IND' CO., LTD.	P0013,N203/204 ~ ETC...20 SHIP SETS	ABS, NK, LR DNV, KR, GL, BV
DAE-SAN ENGINEERING CO., LTD.	N200/206~209,S2000/2023/2028/2109, DH1005/1015 ~ ETC...42 SHIP SETS	ABS, NK, LR DNV, KR, GL, BV
SAM-SUNG HEAVY IND' CO., LTD.	HN2041/42/43 , HN2042..~ ETC...27 SHIP SETS	ABS, NK, LR DNV, KR, GL, BV
STX SHIPBUILDING CO., LTD.	S1235~3011, B5019~39. ~ ETC...110 SHIP SETS	ABS, NK, LR DNV, KR, GL, BV
STX OFFSHOREV& SHIP BUILDING	CHINA - F1004 NOBLE 2ND DRILLSHIP PROJECT	ABS



Product List

MATE'S	CAST STEEL																															
ITEM	GLOBE VALVE														ANGLE VALVE														GATE VALVE			
PRESS	5K			10K			20K		30K		30K(AIR)		40K		5K			10K			20K		30K		30K(AIR)		40K		5K	10K	16K	
TYPE	STOP	SDNR	HULL	STOP	SDNR	HULL	STOP	SDNR	STOP	SDNR	STOP	SDNR	STOP	SDNR	STOP	SDNR	HULL	STOP	SDNR	HULL	STOP	SDNR	STOP	SDNR	STOP	SDNR	STOP	SDNR	NON RISING	NON RISING	NON RISING	
JIS F	F 7311	F 7311	F 7311	F 7319	F 7471	F 7365	F 7313	F 7373	F 7315	F 7315	F 7340	F 7340	F 7317	F 7317	F 7312	F 7312	F 7312	F 7320	F 7372	F 7366	F 7314	F 7374	F 7316	F 7316	F 7475	F 7475	F 7318	F 7318	F 7363	F 7366	F 7369	
32A							○	○			○	○	○	○							○	○			○	○	○	○				
40A							○	○			○	○	○	○							○	○			○	○	○	○				
50A	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○
65A	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○
80A	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○
100A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
125A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
150A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
200A	○	○	○	○	○	○	○	○			○	○			○	○	○	○	○	○	○	○			○	○			○	○	○	○
250A	○	○	○	○	○	○	○	○			○	○			○	○	○	○	○	○	○	○			○	○			○	○	○	○
300A	○	○	○	○	○	○	○	○			○	○			○	○	○	○	○	○	○	○			○	○			○	○	○	○
350A	○	○	○	○	○	○									○	○	○	○	○	○									○	○	○	○
400A	○	○	○	○	○	○									○	○	○	○	○	○									○	○	○	○
450A	○	○	○	○	○	○									○	○	○	○	○	○									○	○	○	○
500A															○	○	○												○	○		

REMARK

- QUICK CLOSING VALVE 5K50A~300A, 10K50A~300A, 16K50~300A (Required Specification Of Air Cylinder)
- STORM VALVE
 - VERTICAL 5K50A~300A, 10K50A~300A, 16K50~300A
 - GLOBE 5K50A~300A, 10K50A~300A, 16K50~300A (JIS F 3060, 3058 – W/Spindle, W/Out Spindle type)
- INERT GAS VALVE(I.G) 5K300A~700A, 10K300A~600, 16K300~600A (Material : SC480 FCD450, FC400)

MATE'S	CAST IRON																				
ITEM	GLOBE VALVE						ANGLE VALVE						GATE VALVE			SWING CH V/V		LIFE CHECK V/V		HOSE VALVE	
PRESS	5K		10K		16K		5K		10K		16K		5K	10K	16K	5K	10K	5K	10K	5K	10K
TYPE	STOP	SDNR	STOP	SDNR	STOP	SDNR	STOP	SDNR	STOP	SDNR	STOP	SDNR	NON RISING	NON RISING	NON RISING			GLOBE	ANGLE	GLOBE	ANGLE
JIS F	F 7305	F 7353	F 7307	F 7375	F 7309	F 7377	F 7306	F 7354	F 7308	F 7376	F 7310	F 7378	F 7363	F 7364	F 7369	F 7372	F 7373	F 7358	F 7359	F 7333	F 7333
32A																					
40A																					
50A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
65A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
80A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
100A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
125A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
150A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
200A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
250A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
300A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
350A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			○	○		
400A	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			○	○		
450A	○	○	○	○	○	○	○	○	○	○	○	○	○	○							
500A							○	○					○	○							

REMARK

- SOIL LINE BRANCH (3WAY) 5K100A, 5K125A, 5K150A

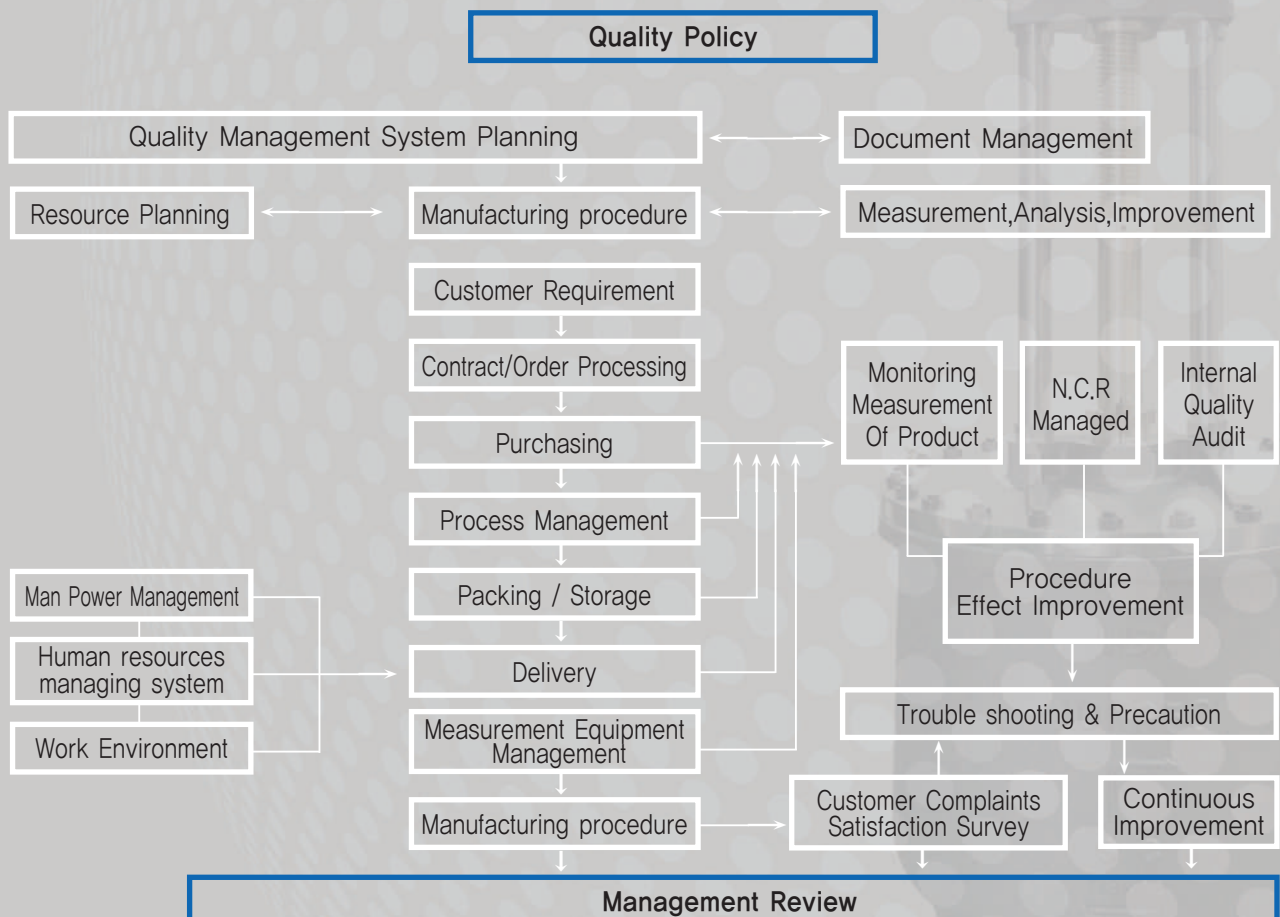
Product List

MATE'S	CAST BRONZE																											
ITEM	GLOBE VALVE										ANGLE VALVE										GATE VALVE		SWING CH V/V	LIFT CH V/V	LIFT CHECK V/V (UB)		HOSE VALVE	CONNECTION FITTING
PRESS	5K		5K(UB)		16K		16K(UB)		20K		5K		5K(UB)		16K		16K(UB)		20K		5K	10K	5K	5K,16K	5K,16K	5K,16K	5K, 10K	5K, 10K
TYPE	STOP	SDNR	STOP	SDNR	STOP	SDNR	HULL	STOP	SDNR	S,U	STOP	SDNR	STOP	SDNR	STOP	SDNR	HULL	STOP	SDNR	S,U	RISING	RISING	GLOBE	GLOBE ANGLE	GLOBE	ANGLE	GLOBE ANGLE	
JIS F	F 7301	F 7351	F 7346	F 7410	F 7348	F 7409	F 7403	F 7413	F 7413	F 7388	F 7302	F 7352	F 7347	F 7412	F 7349	F 7410	F 7404	F 7414	F 7414	F 7389	F 7367	F 7368	F 7371	F 7356	F 7415 F 7417	F 7416 F 7418	F 7333	F 7335
6A										○										○								
10A										○										○								
15A	○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○
20A	○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○
25A	○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○
32A	○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○	○		○	○	○	○	○	○	○	○
40A	○	○	○	○	○	○	○	○	○		○	○						○	○		○	○	○	○	○	○	○	○
50A	○	○									○	○															○	○
65A	○	○									○	○															○	○

REMARK

- F7399 QUICK CLOSING VALVE
 - A TYPE - 5K15A~40A, 16K15A~40A (Required Specification Of Air Cylinder)
 - L TYPE - 5K15A~40A, 16K15A~40A (Required Specification Of Air Cylinder)
- F7379 Brass 30k Stop Valves with Bits Joint(s)
(Globe balve with both bite joints, Screw globe valve with bite joint, Screwed angle with bite joint)
- F7381 5K Flanged Cocks (Two way cock, L-type three way cock, T-type three way cock)
- F7390 Cock with Lock 10A~25A

Quality Control System



Sales Records & Management Policy

1) Sales Record

(Unit : USD)

Yea	Capital	Sales amount
2007	400	5,000,000
2008	400	9,300,000
2009	400	8,400,000
2010	400	8,700,000
2011	400	11,600,000
2012	400	11,200,000
2013	400	10,100,000

2) Management Policy & Plan

- Consolidating of Domestic sales : Consolidate the domestic sales with high quality.
- Strengthen the domestic competitiveness by activating the sales in shipbuilding & plant field
- Compliance of international quality approval system : Foundation of Reliable Quality Approval by International quality approval system ISO9001:2000
- Establish Research & Development Dept.
: Leap to Technology Innovative company (Registered in INNO-BIZ)
- Technology reinforcement of Internal personnel & Foundation of office automation
- Consolidation of Corresponding system for Customer satisfaction
- Leap into an expert corporate on export : Award 3 Million Export Tower at 50th Trade Day
- ISO 14001 : 2004 / KS A 14001 : 2004

List of Manufacturing equipment & Test device

1) Manufacturing equipment

Name	Q'ty	Size	Maker	Remark
Machine Lathe only for Stem	1	580×2500	NAM SUNG	
Lathe	2	900×3000	HAN KOOK	
Lathe	2	900×1200	NAM SUNG	
Lathe	3	710×2500	화 천	
Lathe	6	450×1050	세일중공업	
CNC	2	6"	DAE WOO	
CNC	2	8"	DAE WOO	
Radial	2	1500	JO KWANG	
Radial	2	1100	JO KWANG	
tand Drill	3	1100	JO KWANG	
tand Drill	2	950	JO KWANG	
tand Drill	2	600	WOO CHANG	
Bench Drill	8	ST410	SMC	
Milling machine	3	2호기	TONG IL	
Lapping machine	2	1000×1000	-	

List of Manufacturing equipment & Test device

1) Manufacturing equipment

Name	Q'ty	Size	Maker	Remark
Back spot facing machine	6	—	—	
Electric forklift	1	2.5TON	T.C.M	
Hydraulic Water Test Machine for Swing CH	1	Max dia 125	—	
Hydraulic Water Test Machine	2	Max dia 600	—	
Hydraulic Water Test Machine	2	Max dia 250	—	
Hydraulic Water Test Machine	2	Max dia 80	—	
Electric Welder	2	—	大大	
Oxygen Welder	2	—	—	
Hoist	5	2.8TON	SUNG DO HOIST	
CNC – TERNING CENTER	1	L400C	HYUNDAI WIA	2014,01,14

2) Test device

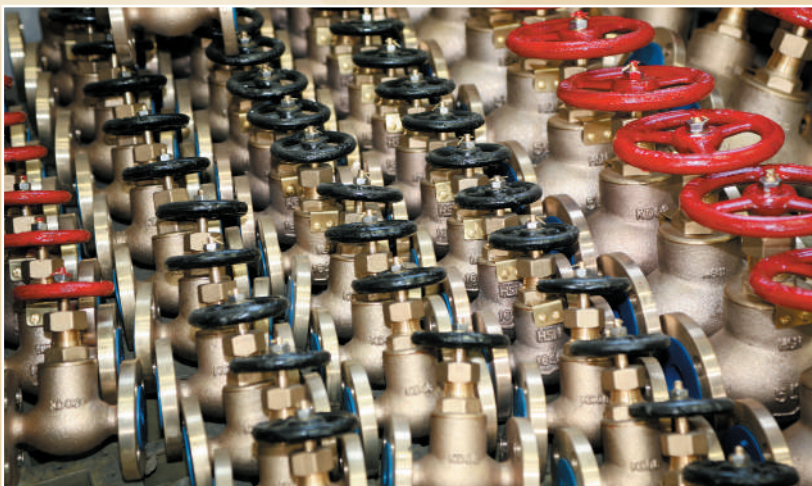
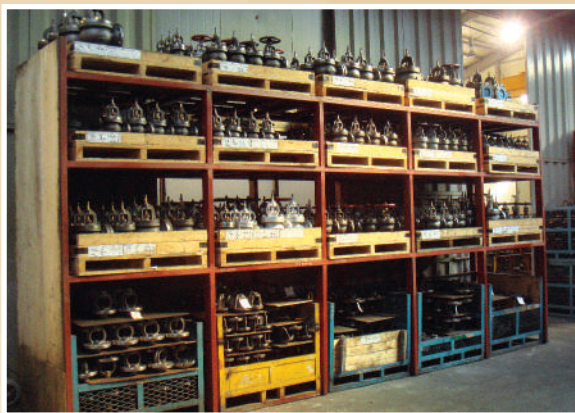
Name	Q'ty	Size	Maker	Official Approval
Height Gauge	3	300mm	Mitutoyo	KTCTI
Depth Gauge	3	300mm	Mitutoyo	KTCTI
Vernier callipers	12	200mm	Mitutoyo	KTCTI
Vernier callipers	10	300mm	Mitutoyo	KTCTI
Vernier callipers	5	600mm	2005	KTCTI
Coating thickness gauge	3	300mm	elcometer	KTCTI
Spring indicating scale	1			KTCTI
Balance level	2			KTCTI
Dial pressure gauge	6	100kg	HISCO	KTCTI
Dial pressure gauge	4	50kg	HISCO	KTCTI
Dial pressure gauge	4	25kg	HISCO	KTCTI
Radial & Digital Gauge	1	200mm	Mitutoyo	KTCTI

2) Test device

Name	Q'ty	Size	Maker	Official Approval
Cylinder Gauge	1	18~34mm	Mitutoyo	KTCTI
Cylinder Gauge	1	1~17mm	Mitutoyo	KTCTI
Cylinder Gauge	1	35~60mm	Mitutoyo	KTCTI
Block Gauge	1	2급 (193EA)	Mitutoyo	KTCTI
Micro Gauge	1	175~200mm	Mitutoyo	KTCTI
Ultrasonic thickness gauge	1	1.2~225mm	TIME Group Inc.	KTCTI

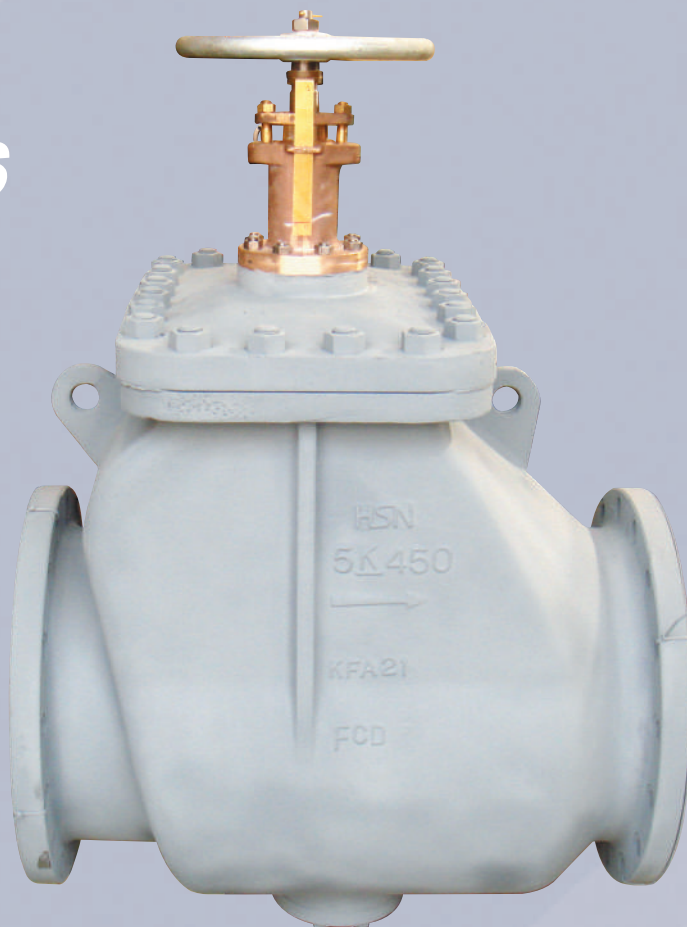


Hyo Shin Industrial Corp.

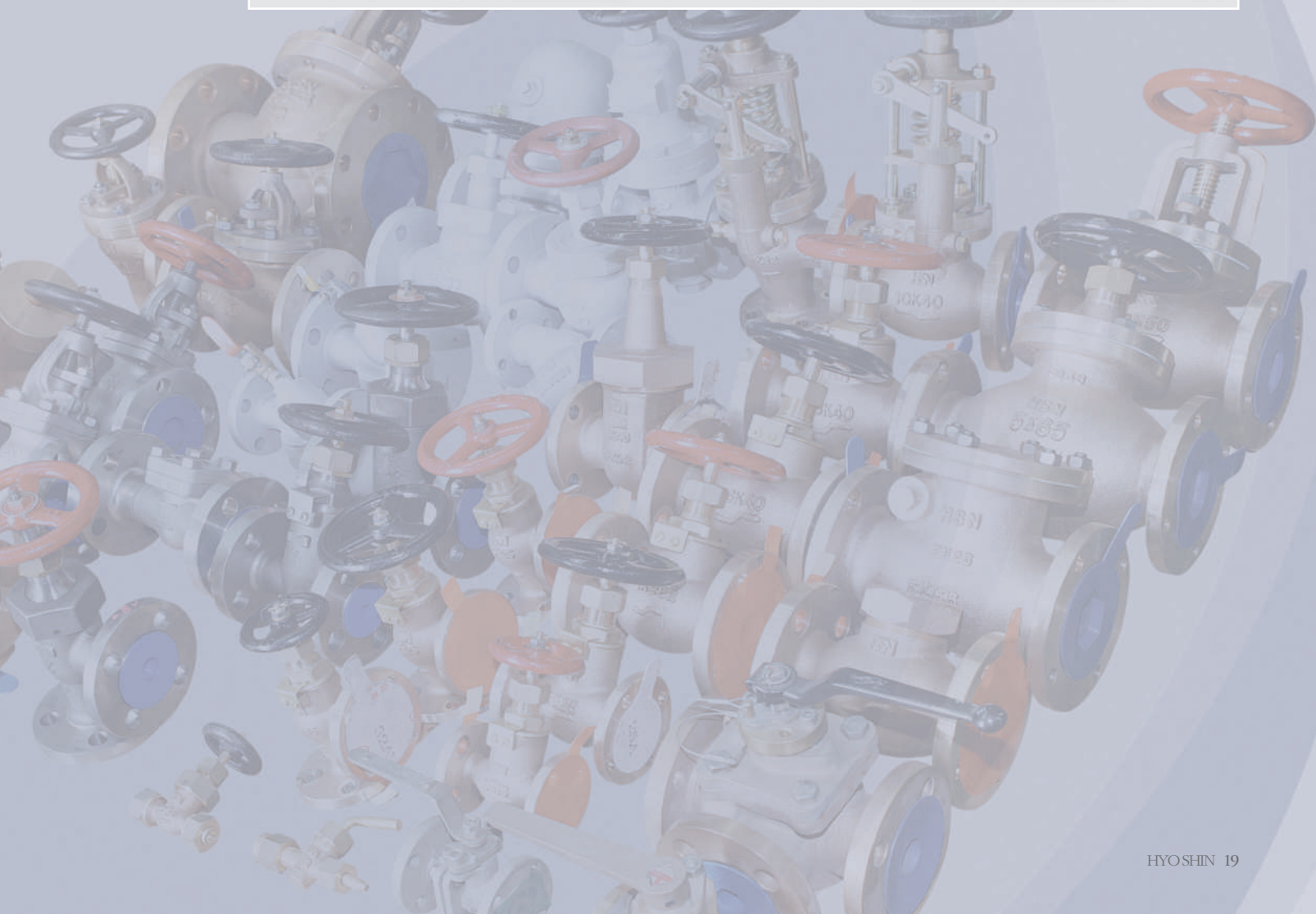




HYO SHIN VALVES



SPECIAL VALVES



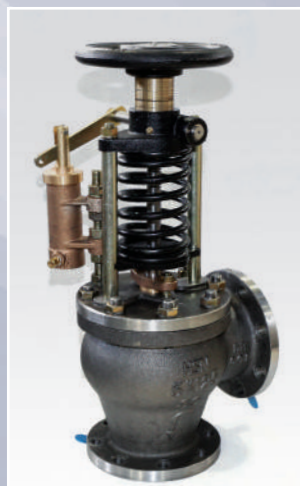
BRONZE VALVES



CAST STEEL & CAST IRON & STAINLESS VALVES







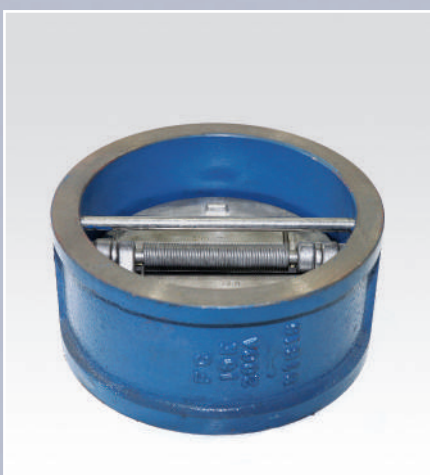
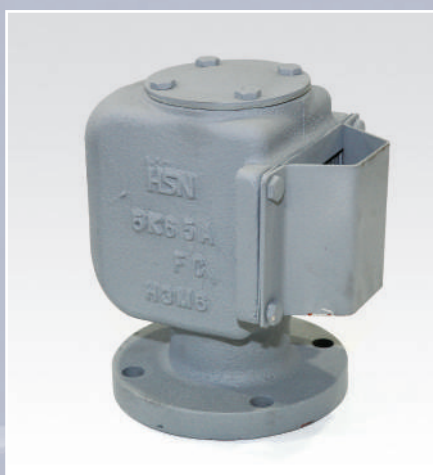


TABLE OF CONTENTS - JIS VALVE -

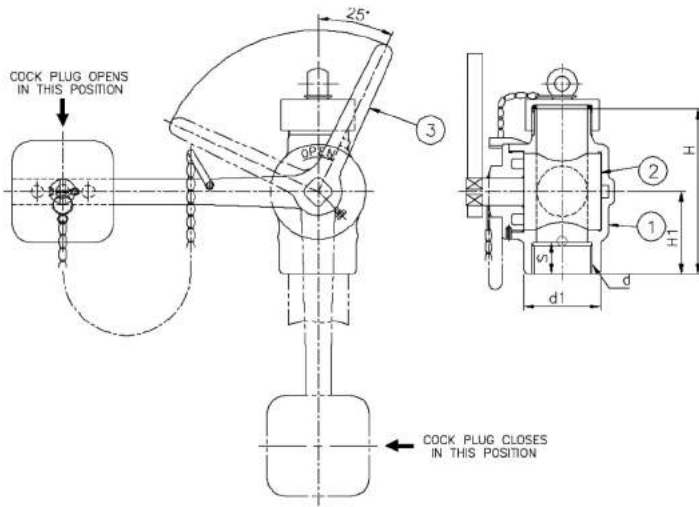
NO.	SERIES NO.	PRESSURE		DESCRIPTION
26	F 3018		40A~80A	Self Closing Parallel Cock Heads
26	F 3019		40A~80A	Self Closing Gate Valve Heads For Short Sounding Pipe
27	F 3056	5K	40A~80A	Foot Valve
27	F 3057	5K,10K	50A~200A	Cast Bronze Storm Valve Without Handle
28	F 3058	5K,10K	50A~200A	Cast Steel Storm Valve Without Handle
28	F 3059	5K,10K	50A~200A	Cast Bronze Storm Valve Vertical & Angle Type
29	F 3060	5K,10K	50A~200A	Cast Steel Storm Valve Vertical & Angle Type
29	F 7121	5K	25A~400A	Cast Iron & Cast Steel Can Water Filter
30	F 7121	10K	25A~400A	Cast Iron & Cast Steel Can Water Filter
30	F 7203	5K	40A~250A	Cast Iron & Cast Steel Mud Box
31	F 7208	5K	40A~200A	Cast Iron & Cast Steel Duplex Oil Strainer (H-Type)
31	F 7208	10K	40A~200A	Cast Iron & Cast Steel Duplex Oil Strainer (H-Type)
32	F 7209	5K	25A~300A	Cast Iron & Cast Steel Simplex Oil Strainers
32	F 7218	5K	25A~200A	Cast Iron & Stainless Steel Cylindrical Sight Glasses
33	F 7224	5K	20A~40A	Cast Iron & Cast Steel Small Size Duplex Oil Strainer
33	F 7234	10K	15A~100A	Flat Sight Glasses
34	F 7301	5K	15A~65A	Bronze Globe Valve
34	F 7302	5K	15A~65A	Bronze Angle Valve
35	F 7303 & F 7409	16K	15A~40A	Bronze Globe Valve & Globe Check Valve
35	F 7304 & F 7410	16K	15A~40A	Bronze Angle Valve & Angle Check Valve
36	F 7305 & F 7353	5K	50A~450A	Cast Iron Globe Valve & Globe Check Valve
36	F 7306 & F 7354	5K	50A~550A	Cast Iron Angle Valve & Angle Check Valve
37	F 7307 & F 7375	10K	50A~450A	Cast Iron Globe Valve & Globe Check Valve
37	F 7308 & F 7376	10K	50A~550A	Cast Iron Angle Valve & Angle Check Valve
38	F 7309 & F 7377	16K	50A~200A	Cast Iron Globe Valve & Globe Check Valve
38	F 7310 & F 7378	16K	50A~200A	Cast Iron Angle Valve & Angle Check Valve
39	F 7305 Base	5K	50A~450A	Cast Steel Globe Valve & Globe Check Valve
39	F 7306 Base	5K	50A~550A	Cast Steel Angle Valve & Angle Check Valve
40	F 7311	5K	250A,300A	Cast Steel Globe Valve & Globe Check Valve
40	F 7312	5K	250A,300A	Cast Steel Angle Valve & Angle Check Valve
41	F 7313 & F 7473	20K	32A~400A	Cast Steel Globe Valve & Globe Check Valve
41	F 7314 & F 7474	20K	32A~350A	Cast Steel Angle Valve & Angle Check Valve
42	F 7315 & F 7316	30K	100A~150A	Cast Steel Globe Valve & Angle Valve
42	F 7317 & F 7318	40K	32A~150A	Cast Steel Globe Valve & Angle Valve
43	F 7319 & F 7471	10K	50A~450A	Cast Steel Globe Valve & Globe Check Valve
43	F 7320 & F 7472	10K	50A~550A	Cast Steel Angle Valve & Angle Check Valve
44	F 7321 & F 7322	5K	15A~40A	Malleable Iron & Ductile Iron Globe , Angle Valve
44	F 7323 & F 7324	16K	15A~40A	Malleable Iron & Ductile Iron Globe , Angle Valve
45	F 7333	5K,10K	50A~65A	Cast Iron Hose Globe Valve & Hose Angle Valve
45	F 7334	5K,10K	15A~25A	Bronze Hose Globe Valve & Hose Angle Valve
46	F 7334	5K,10K	40A	Bronze Hose Globe Valve & Hose Angle Valve
46	F 7334	5K,10K	50A~65A	Bronze Hose Globe Valve & Hose Angle Valve
47	F 7334	5K,10K	50A~65A	Bronze Hose Globe Valve & Hose Angle Valve (Small)
47	F 7336	30K	6A~40A	Forged Steel Globe Air Valve – S , F , U Type
48	F 7337	30K	6A~25A	Forged Steel Angle Air Valve– S , F Type
48	F 7340	30K	32A~150A	Cast Steel Globe Valve
49	F 7475	30K	32A~200A	Cast Steel Angle Valve
49	F 7346 & F 7347	5K	15A~40A	Bronze Globe Valve & Angle Valve – Union Bonnet
50	F 7348 & F 7349	16K	15A~40A	Bronze Globe Valve & Angle Valve – Union Bonnet
50	F 7350	10K	50A~300A	Cast Steel Hull Angle Valve

TABLE OF CONTENTS - JIS VALVE -

NO.	SERIES NO.	PRESSURE		DESCRIPTION
51	F 7350	10K	350A~800A	Cast Steel Hull Angle Valve
51	F 7351	5K	15A~65A	Bronze Globe Check Valve
52	F 7352	5K	15A~65A	Bronze Angle Check Valve
52	F 7356 & F 7371	5K	10A~40A	Bronze Lift Check Valve & Swing Check Valve
53	F 7358 & F 7359	5K	50A~200A	Cast Iron Lift Globe Check & Lift Angle Check Valve
53	F 7360	10K	50A~500A	Cast Steel Hull Gate Valve
54	F 7360	10K	550A~800A	Cast Steel Hull Gate Valve
54	F 7363	5K	50A~400A	Cast Iron & Cast Steel Gate Valve
55	F 7363	5K	450A~600A	Cast Iron & Cast Steel Gate Valve
55	F 7364	10K	50A~600A	Cast Iron Gate Valve
56	F 7365	10K	50A~450A	Cast Steel Hull Globe Valve
56	F 7366	10K	50A~400A	Cast Steel Gate Valve
57	F 7367 & F 7368	5K,10K	15A~40A	Bronze Gate Valve (Rising Stem)
57	F 7369	16K	50A~400A	Cast Iron Gate & Cast Steel Valve
58	F 7372 & F 7373	5K,10K	50A~350A	Cast Iron & Cast Steel Swing Check Valve
58	F 7381	5K	25A~65A	Bronze Cock Valve - 2Way & 3Way
59	F 7387	16K	6A~20A	Bronze Cock Valve - S & U TYPE
59	F 7398	5K,10K	15A~50A	Bronze Self Closing Drain Valve - F & U Type
60	F 7399	5K,10K	15A~40A	Emergency Shut-Off Valves - A & L Type
60	F 7399	5K,10K	50A~200A	Emergency Shut-Off Valves - A & L Type
61	F 7403 & F 7404	16K	15A~40A	Bronze Hull Globe Valve , Bronze Hull Angle Valve
61	F 7411 & F 7412	5K	15A~40A	Bronze Globe Check , Angle Check Valve Union Bonnet
62	F 7413 & F 7414	16K	15A~40A	Bronze Globe Check , Angle Check Valve Union Bonnet
62	F 7415 & F 7416	5K	15A~40A	Bronze Lift Check Globe , Angle Valve Union Bonnet
63	F 7417 & F 7418	16K	15A~40A	Bronze Lift Check Globe , Angle Valve Union Bonnet
63	B 2026 & F 2027	10K	15A~50A	Bronze Globe Valve , Bronze Angle Valve
64		5K,10K	15A~100A	2-Way Ball Valve
64		20K,30K	15A~50A	2-Way Ball Valve
65		5K,10K	15A~150A	3-Way Ball Valve
65	10K, 20K, 150Lb, 300Lb		50A~600A	Duo Check Valve - Wafer Type
66		5K, 10K, 20K	50A~650A	Duo Check Valve - Flange Type
66	F 7399 Base	5K,16K	15A~40A	Hydraulic Operated Shut-Off Valve
67	F 7399 Base	5K,10K	50A~200A	Hydraulic Operated Shut-Off Valve
67		16K	300A~600A	Inert Gas Line Non Return Valve (I.G Valve)
68		10K	300A~600A	Inert Gas Line Non Return Valve (I.G Valve)
68		5K	300A~600A	Inert Gas Line Non Return Valve (I.G Valve)
69		5K	100A~150A	Cast Iron Soil Line Branch Valve (3-Way Valve)
69			8A~50A	Screw Ball Valve
70		5K,10K	40A~80A	Box Type Air Vent Head Disc Float
70		5K	100A~600A	Box Type Air Vent Head Disc Float
71		10K	15A~80A	Safety Relief Valve
71		5K,16K	15A~25A	STEAM TRAP
72			15A~50A	Air Trap - PT Screw
72		30K	32A	JIS 30K32A For Air Pressure Reducing Valve Unit
73				Reflex Type Level Gauge
73	F 7480	5K,10K,16K	40A~300A	Butterfly Valve (Wafer, Lug, Flange Type)
74	F 7480	5K,10K,16K	350A~1000A	Butterfly Valve (Wafer, Lug, Flange Type)
74		10K	15A~40A	Y - Type Strainer
75		10K	50A~350A	Y - Type Strainer
76				Reference Date / Flange Table (ANSI)

SERIES F 3018 Self Closing Parallel Cock Heads

Manufactured in accordance to JIS F 7400



SERIES F 3018

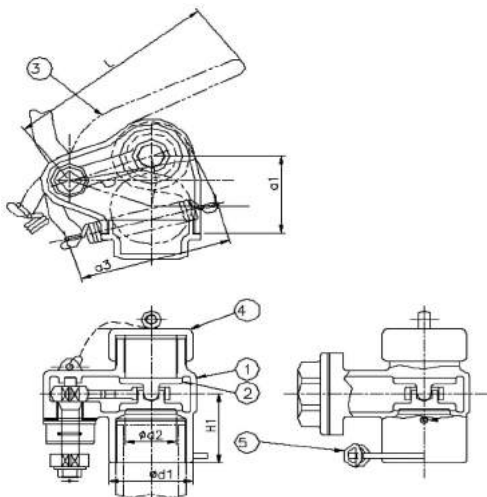
Part No.	Material
1 – Body	Bronze
2 – Plug	Bronze
3 – Lever	Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.3 [3.0]
Seat	–

SIZE	H	H1	S	d1	d
040	130	65	25	60	PF 1-1/2
050	135	70	30	70	PF 2
065	135	70	30	86	PF 2-1/2
080	145	80	35	100	PF 3

SERIES F 3019 Self Closing Gate Valve Heads For Short Sounding Pipe

Manufactured in accordance to JIS F 7400



SERIES F 3019

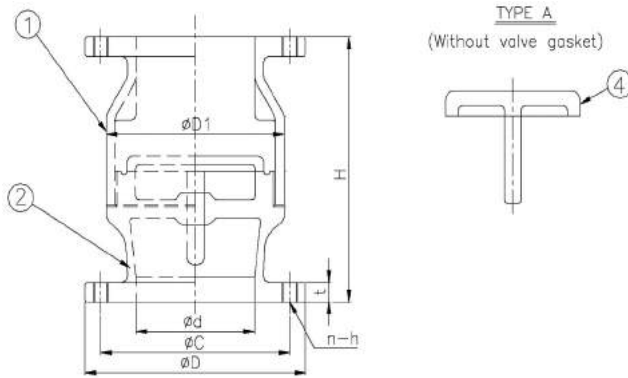
Part No.	Material
1 – Body	Bronze
2 – Disc	Bronze
3 – Lever	Bronze
4 – Cap	Bronze
5 – Spring	Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.3 [3.0]
Seat	–

SIZE	d1	d2	a1	a3	H1	L
040	58	35	60	109	54	180
050	70	50	75	119	60	200
065	85	50	75	119	65	200
080	100	50	75	119	70	200

SERIES F 3056 Foot Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2220 - 5K



SERIES F 3056 Foot Valve

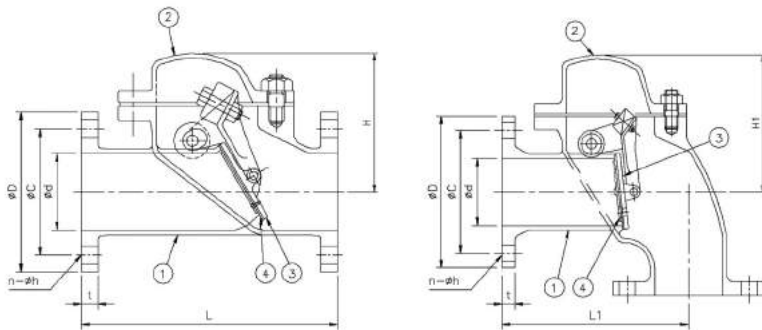
Part No.	Material
1 - Body (Upper)	Bronze
2 - Body (Lower)	Bronze
3 - Valve	Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	0.2 [2.0]
Seat	—

SIZE	d	C	D	t	D1	H
040	40	95	120	12	80	130
050	50	105	130	14	95	142
080	80	145	180	14	142	194

SERIES F 3057 - JIS 5K, 10K Cast Bronze Storm Valve - Without Handle

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2220 - 5K, 10K



SERIES F 3057 Vertical Storm Valve

SERIES F 3057 Angle Storm Valve

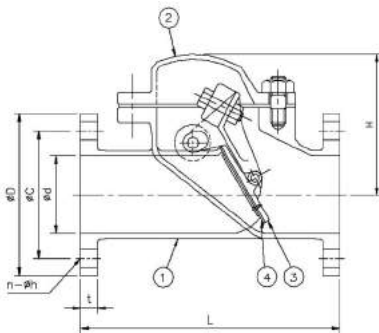
Part No.	Material
1 - Body	Cast Bronze
2 - Bonnet	Cast Bronze
3 - Seat	NBR
4 - Disc	Cast Bronze, Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.5 [5.0]
Seat	—

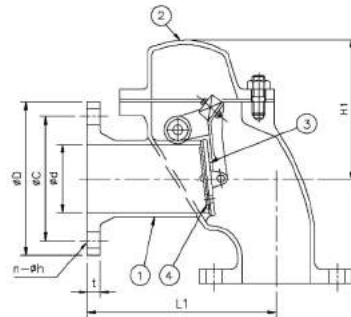
SIZE	d	FLANGE 5K				FLANGE 10K				L	H	L1	H1
		C	D	n-h	t	C	D	n-h	t				
050	50	105	130	4-15	14	120	155	4-19	16	210	106	170	130
065	65	130	155	4-15	14	140	175	4-19	18	240	124	200	140
080	80	145	180	4-19	14	150	185	8-19	18	260	136	220	154
100	100	165	200	8-19	16	175	210	8-19	18	280	161	250	170
125	125	200	235	8-19	16	210	250	8-23	20	330	181	270	198
150	150	230	265	8-19	18	240	280	8-23	22	360	199	310	211
200	200	280	320	8-23	20	290	330	12-23	22	500	265	400	265

SERIES F 3058 - JIS 5K, 10K Cast Steel Storm Valve - Without Handle

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2220 - 5K, 10K



SERIES F 3058 Vertical Storm Valve



SERIES F 3058 Angle Storm Valve

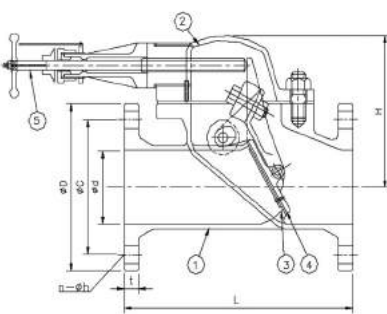
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Seat	NBR
4 - Disc	Stainless Steel, Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	0.5 [5.0]
Seat	—

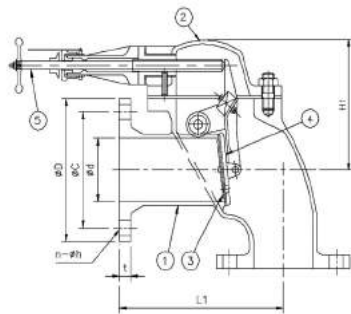
SIZE	d	FLANGE 5K				FLANGE 10K				L	H	L1	H1
		C	D	n-h	t	C	D	n-h	t				
050	50	105	130	4-15	14	120	155	4-19	16	210	106	170	130
065	65	130	155	4-15	14	140	175	4-19	18	240	124	200	140
080	80	145	180	4-19	14	150	185	8-19	18	260	136	220	154
100	100	165	200	8-19	16	175	210	8-19	18	280	161	250	170
125	125	200	235	8-19	16	210	250	8-23	20	330	181	270	198
150	150	230	265	8-19	18	240	280	8-23	22	360	199	310	211
200	200	280	320	8-23	20	290	330	12-23	22	500	265	400	265

SERIES F 3059 - JIS 5K, 10K Cast Bronze Storm Valve - Vertical & Angle Type

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2220 - 5K, 10K



SERIES F 3059 Vertical Storm Valve



SERIES F 3059 Angle Storm Valve

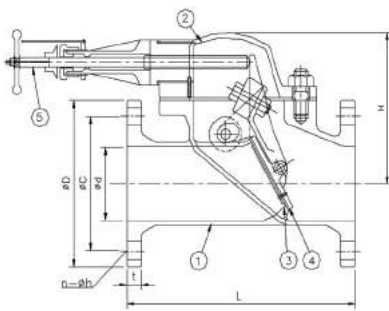
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Seat	NBR
4 - Disc	Cast Bronze, Stainless Steel
5 - Stem	Brass, Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.5 [5.0]
Seat	—

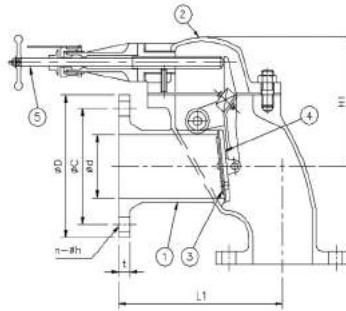
SIZE	d	FLANGE 5K				FLANGE 10K				L	H	L1	H1
		C	D	n-h	t	C	D	n-h	t				
050	50	105	130	4-15	14	120	155	4-19	16	210	127	170	130
065	65	130	155	4-15	14	140	175	4-19	18	240	136	200	140
080	80	145	180	4-19	14	150	185	8-19	18	260	161	220	154
100	100	165	200	8-19	16	175	210	8-19	18	280	167	250	170
125	125	200	235	8-19	16	210	250	8-23	20	330	190	270	198
150	150	230	265	8-19	18	240	280	8-23	22	360	206	310	211
200	200	280	320	8-23	20	290	330	12-23	22	500	265	400	265

SERIES F 3060 - JIS 5K, 10K Cast Steel Storm Valve Vertical & Angle Type

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2220 - 5K, 10K



SERIES F 3060 Vertical Storm Valve



SERIES F 3060 Angle Storm Valve

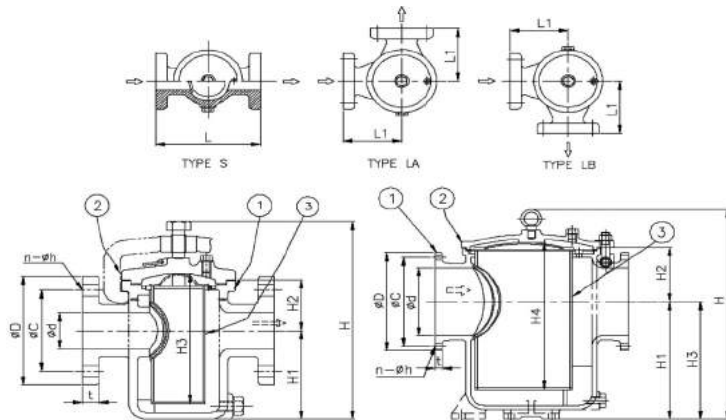
Part No.	Material
1 - Body	Cast Bronze
2 - Bonnet	Cast Bronze
3 - Seat	NBR
4 - Disc	Cast Bronze, Stainless Steel
5 - Stem	Brass, Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.5 [5.0]
Seat	—

SIZE	d	FLANGE 5K				FLANGE 10K				L	H	L1	H1
		C	D	n-h	t	C	D	n-h	t				
050	50	105	130	4-15	14	120	155	4-19	16	210	131	170	130
065	65	130	155	4-15	14	140	175	4-19	18	240	141	200	140
080	80	145	180	4-19	14	150	185	8-19	18	260	155	220	154
100	100	165	200	8-19	16	175	210	8-19	18	280	171	250	170
125	125	200	235	8-19	16	210	250	8-23	20	330	195	270	198
150	150	230	265	8-19	18	240	280	8-23	22	360	212	310	211
200	200	280	320	8-23	20	290	330	12-23	22	500	265	400	265

SERIES F 7121 - JIS 5K Cast Iron & Cast Steel Can Water Filter

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 5K



SERIES F 7121 [25A~100A] Water Strainer

SERIES F 7121 [125A~400A] Water Strainer

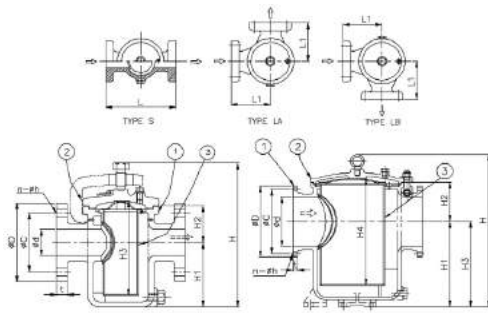
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Cover	Cast Iron / Cast Steel
3 - Strainer Cylinder	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.3 [3.0]

SIZE	d	C	D	n-h	t	H	H1	H2	H3	H4
025	25	75	95	4-12	14	180	75	34.5	100	—
032	40	90	115	4-15	16	215	85	42	119	—
040	40	95	120	4-15	16	215	85	42	119	—
050	50	105	130	4-15	16	240	100	49	140	—
065	65	130	155	4-15	18	305	135	59	184	—
080	80	145	180	4-19	18	340	152	68	209	—
100	100	165	200	8-19	20	400	185	80	251	—
125	125	200	235	8-19	20	485	207	125	235	295
150	150	230	265	8-19	22	575	258	145	290	360
200	200	280	320	8-23	24	665	320	170	350	440
250	250	345	385	12-23	26	825	412	210	450	565
300	300	390	430	12-23	28	920	473	235	515	645
350	335	435	480	12-25	30	1030	529	265	575	780
400	380	495	540	16-25	30	1135	595	300	645	830

SERIES F 7121 - JIS 10K Cast Iron & Cast Steel Can Water Filter

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 10K



SERIES F 7121 [25A~100A] Water Strainer SERIES F 7121 [125A~400A] Water Strainer

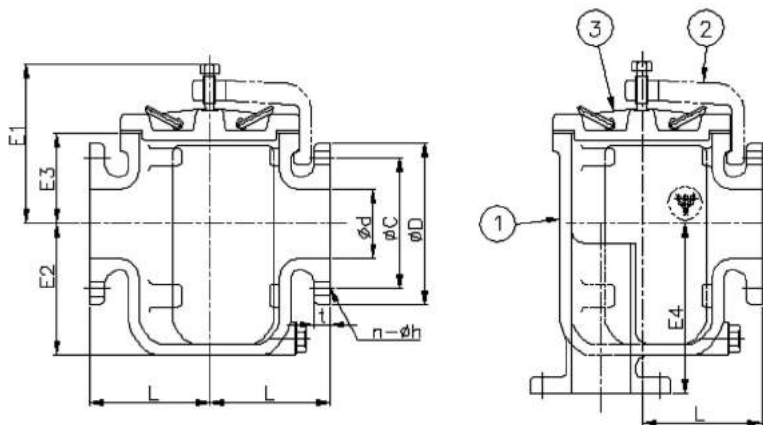
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Cover	Cast Iron / Cast Steel
3 - Strainer Cylinder	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.3 [3.0]

SIZE	d	C	D	n-h	t	H	H1	H2	H3	H4
025	25	90	125	4-15	18	180	75	34.5	100	-
032	40	100	135	4-19	20	215	85	42	119	-
040	40	105	140	4-19	20	215	85	42	119	-
050	50	120	155	4-19	20	240	100	49	140	-
065	65	140	175	4-19	22	305	135	59	184	-
080	80	150	185	8-19	22	340	152	68	209	-
100	100	175	210	8-19	24	400	185	80	251	-
125	125	210	250	8-23	24	485	207	125	235	295
150	150	240	280	8-23	26	575	258	145	290	360
200	200	290	330	12-23	26	665	320	170	350	440
250	250	355	400	12-25	30	825	412	210	450	565
300	300	400	445	16-25	32	920	473	235	515	645
350	335	445	490	12-25	34	1030	529	265	575	780
400	380	510	560	16-27	36	1135	595	300	645	830

SERIES F 7203 - JIS 5K Cast Iron & Cast Steel Mud Box

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 5K



SERIES F 7203 - S type Mud Box

SERIES F 7203 - L type Mud Box

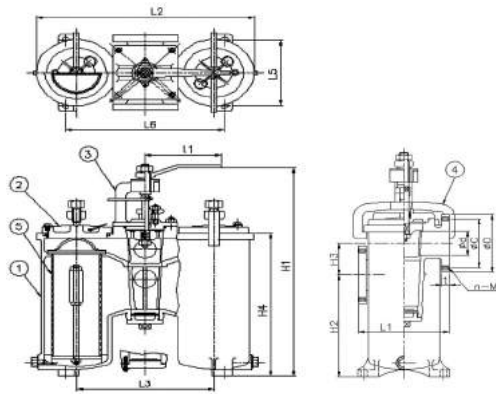
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Yoke Of Cover	Cast Iron / Cast Steel
3 - Cover	SS41

Test Pressure MPa[Kgf/cm ²]	
Body	0.1 [1.0]
Seat	-

SIZE	d	C	D	n-h	t	L	E1	E2	E3	E4
040	40	95	120	4-15	16	90	145	73	55	110
050	50	105	130	4-15	16	120	145	90	70	135
065	65	130	155	4-15	18	150	180	116	90	160
080	80	145	180	4-19	18	160	195	131	100	180
100	100	165	200	8-19	20	190	225	152	110	210
125	125	200	235	8-19	20	235	275	214	140	285
150	150	230	265	8-19	22	280	320	267	170	345
200	200	280	320	8-23	24	330	405	330	210	440
250	250	345	385	12-23	26	380	525	400	280	500

SERIES F 7208 - JIS 5K Cast Iron & Cast Steel Duplex Oil Strainer (H-Type)

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 5K



SERIES F 7208 Duplex Oil Strainer

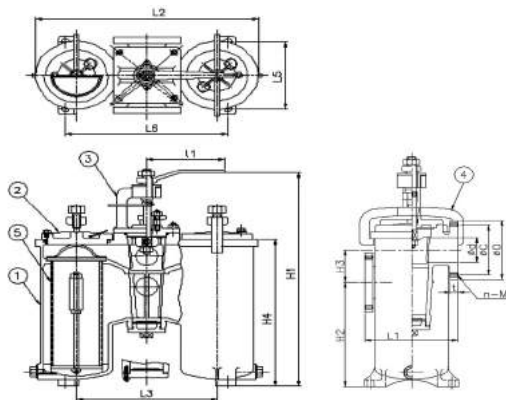
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Bonnet	Cast Iron / Cast Steel
3 - Upper Cock Cover	Cast Iron / Cast Steel
4 - Cover Yoke	Cast Iron / Cast Steel
5 - Strainer Filter	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.6 [6.0]
Cock Plug	0.44 [4.4]

SIZE	d	C	D	n-M	t	L1	L2	L3	L5	L6	H1	H2	H3	H4	I1
040	40	95	120	4-M12	12	170	384	236	150	280	449	135	54	232	170
050	50	105	130	4-M12	17	180	415	260	150	302	515.5	219	66	322	170
065	65	130	155	4-M12	18	215	514	324	185	375	660.5	272.5	85	405	200
080	80	145	180	4-M16	20	245	600	380	215	440	684.5	312	102	470	250
100	100	165	200	8-M16	20	285	718	456	225	524	816	317	126	565	300
125	125	200	235	8-M16	20	330	852	544	305	620	952	430.5	157	670	350
150	150	230	265	8-M16	22	410	1046	680	365	-	1299	516	201	818	370
200	200	280	320	8-M20	24	490	1250	820	430	-	1520	645	245	1020	430

SERIES F 7208 - JIS 10K Cast Iron & Cast Steel Duplex Oil Strainer (H-Type)

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 10K



SERIES F 7208 Duplex Oil Strainer

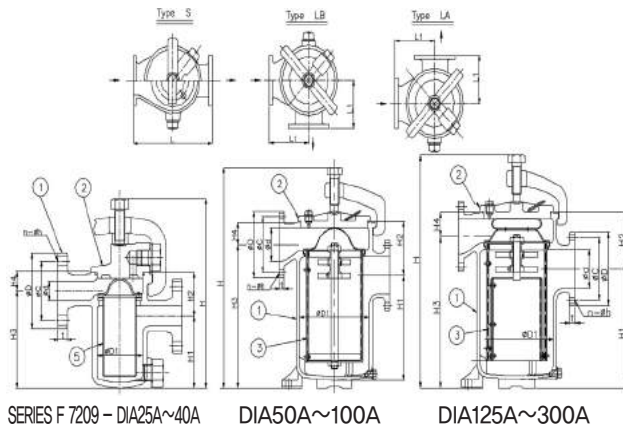
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Bonnet	Cast Iron / Cast Steel
3 - Upper Cock Cover	Cast Iron / Cast Steel
4 - Cover Yoke	Cast Iron / Cast Steel
5 - Strainer Filter	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.6 [6.0]
Cock Plug	0.44 [4.4]

SIZE	d	C	D	n-M	t	L1	L2	L3	L5	L6	H1	H2	H3	H4	I1
040	40	105	140	4-M16	20	170	384	236	150	280	449	135	54	232	170
050	50	120	155	4-M16	20	180	415	260	150	302	515	219	66	322	170
065	65	140	175	4-M16	22	215	514	324	185	375	660	272	85	405	200
080	80	150	185	4-M16	22	245	600	380	215	440	684	312	102	470	250
100	100	175	210	8-M16	24	285	718	456	225	524	816	317	126	565	300
125	125	210	250	8-M16	24	330	852	544	305	620	952	430	157	670	350
150	150	240	280	8-M20	26	430	1046	680	365	-	1299	516	201	818	370
200	200	290	330	12-M20	26	490	1250	820	430	-	1520	645	245	1020	430

SERIES F 7209 - JIS 5K Cast Iron & Cast Steel Simplex Oil Strainers

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 5K



SERIES F 7209 - DIA25A~40A

DIA50A~100A

DIA125A~300A

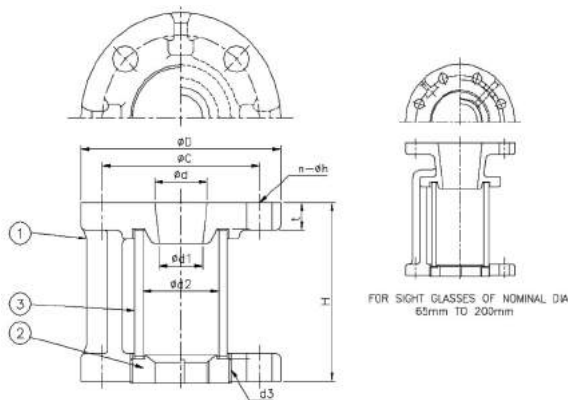
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Cover	Cast Iron / Cast Steel
3 - Strainer Cylinder	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.75 [7.5]

SIZE	d	C	D	n-h	t	L	L1	D1	H	H1	H2	H3	H4
025	25	75	95	4-12	14	190	95	70	240	91	55	123	23
032	40	90	115	4-15	16	260	130	110	315	145	75	188	32
040	40	95	120	4-15	16	260	130	110	315	145	75	188	32
050	50	105	130	4-15	16	280	140	160	395	187	92	258	42
065	65	130	155	4-15	18	340	170	200	495	248	118	340	51
080	80	145	180	4-19	18	370	185	230	525	258	132	356	59
100	100	165	200	8-19	20	420	210	265	630	315	160	430	70
125	125	200	235	8-19	20	450	225	285	745	373	193	482	84
150	150	230	265	8-19	22	470	235	300	825	410	231	540	101
200	200	280	320	8-23	24	570	285	360	970	475	285	630	130
250	250	345	385	12-23	26	700	350	440	1140	529	361	729	161
300	300	390	430	12-23	28	800	400	470	1220	542	420	772	190

SERIES F 7218 - JIS 5K Cast Iron & Stainless Steel Cylindrical Sight Classes

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 5K



SERIES F 7218 Sight Class

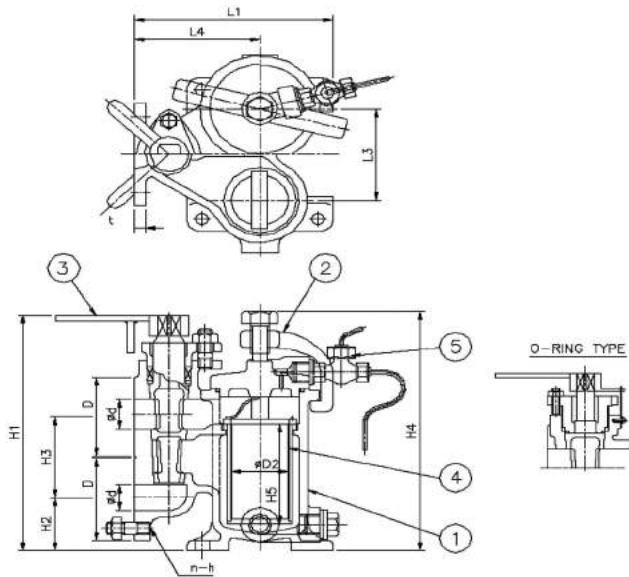
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Cover	Bronze / Stainless Steel
3 - Strainer Cylinder	Polymethyl

Test Pressure MPa[Kgf/cm ²]	
Body	0.15 [1.5]

SIZE	d	C	D	n-h	t	d1	d2	d3	H	Kg
025	25	75	95	4-12	14	20,5	36	M48x2	90	1,67
032	40	90	115	4-15	16	27	45	M60x2	100	2,67
040	40	95	120	4-15	16	35	52	M68x2	100	2,80
050	50	105	130	4-15	16	45	61	M76x2	115	3,30
065	65	130	155	4-15	18	53	83	M100x2	160	5,56
080	80	145	180	4-19	18	66	92	M110x2	180	8,87
100	100	165	200	8-19	20	85	110	M130x2	210	11,6
125	125	200	235	8-19	20	110	140	M165x2	245	15,8
150	150	230	265	8-19	22	128	168	M195x2	310	23,3
200	200	280	320	8-23	24	175	210	M240x2	380	36,

SERIES F 7224 - JIS 5K *Cast Iron & Cast Steel Small Size Duplex Oil Strainer*

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 5K



SERIES F 7224 Small Duplex Oil Strainer

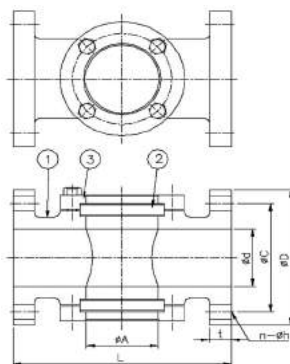
Part No.	Material
1 - Body	Cast Iron / Cast Steel
2 - Cover	Cast Iron / Cast Steel
3 - Handle	SS41
4 - Strainer Cylinder	Stainless Steel
3 - Air Purge Plug	F 7387

Test Pressure MPa[Kgf/cm ²]	
Body	0.3 [3.0]
Seat	-

SIZE	d	D	n-h	t	L1	L3	L4	H1	H2	H3	H4	H5	D2
020	25	78	4-M10	14	167	90	105	235	53	80	250	100	48
025	25	78	4-M10	14	167	90	105	235	53	80	250	100	48
032	32	78	4-M12	16	211	112	130	315	75	100	295	120	67
040	40	95	4-M12	16	241	132	150	355	78	125	330	125	86

SERIES F 7234 - JIS 10K *Flat Sight Glasses*

Manufactured in accordance to JIS F 7200 / Flanges as per JIS B 2220 - 10K



SERIES F 7234 Sight Class

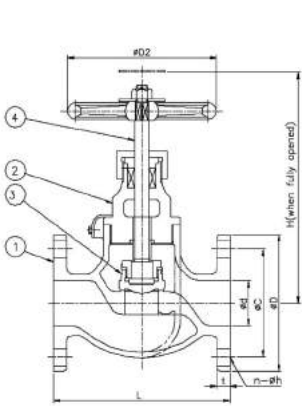
Part No.	Material
1 - Body	Cast Iron
2 - Flat Glass	Class
3 - Cover	Cast Iron

Test Pressure MPa[Kgf/cm ²]	
Body	0.7 [7.1]

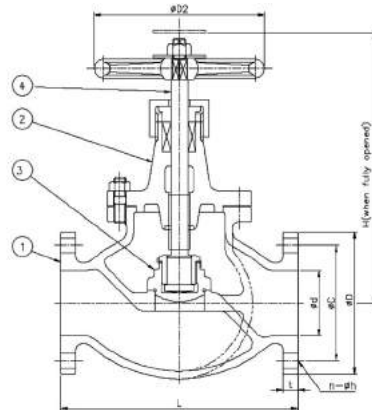
SIZE	d	C	D	n-h	t	L	A
015	15	70	95	4-15	12	150	40
020	20	75	100	4-15	14	150	40
025	25	90	125	4-19	16	170	50
032	32	100	135	4-19	18	200	70
040	40	105	140	4-19	18	200	70
050	50	120	155	4-19	18	220	80
065	65	140	175	4-19	18	250	100
080	80	150	185	8-19	18	270	120
100	100	175	210	8-19	20	320	150

SERIES F 7301 - JIS 5K Bronze Globe Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7301 DIA 15A~40A Globe Valve



DIA 50A~65A Globe Valve

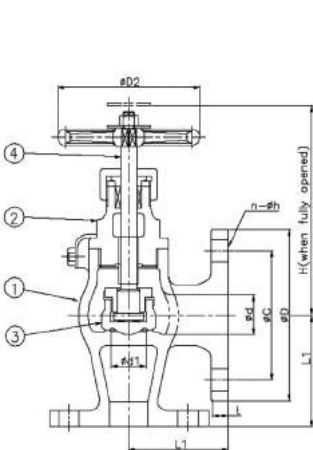
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

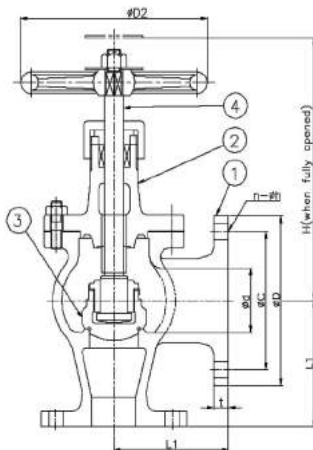
SIZE	d	L	C	D	n-h	t	H	D2	Kg
015	15	100	60	80	4-12	9	130	80	2.02
020	20	110	65	85	4-12	10	140	100	2.86
025	25	120	75	95	4-12	10	160	125	3.54
032	32	140	90	115	4-15	12	170	125	5.00
040	40	160	95	120	4-15	12	190	140	6.48
050	50	210	105	130	4-15	14	235	140	11.7
065	65	250	130	155	4-15	14	260	160	17.0

SERIES F 7302 - JIS 5K Bronze Angle Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7302 DIA 15A~40A Angle Valve



DIA 50A~65A Angle Valve

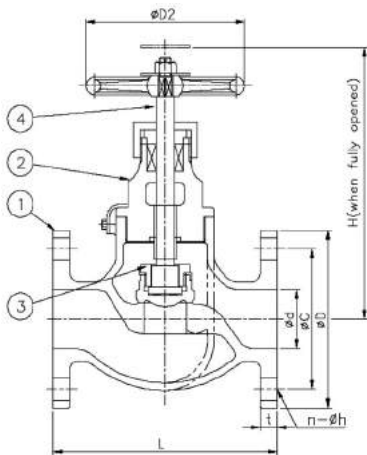
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

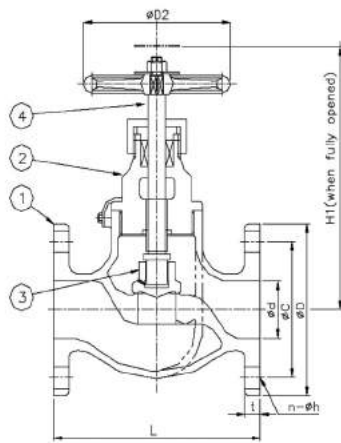
SIZE	d	L1	C	D	n-h	t	H	D2	Kg
015	15	55	60	80	4-12	9	120	80	1.98
020	20	60	65	85	4-12	10	130	100	2.73
025	25	65	75	95	4-12	10	145	125	3.44
032	32	80	90	115	4-15	12	150	125	4.77
040	40	85	95	120	4-15	12	165	140	5.99
050	50	100	105	130	4-15	14	200	140	10.1
065	65	115	130	155	4-15	14	220	160	15.6

SERIES F 7303 - JIS 16K Bronze Globe Valve / SERIES F 7409 - JIS 16K Bronze Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 16K



SERIES F 7303 Globe Valve



SERIES F 7409 Globe Check Valve

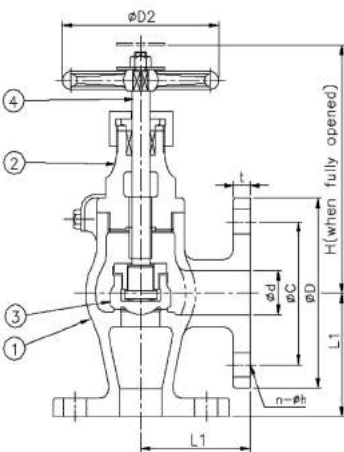
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

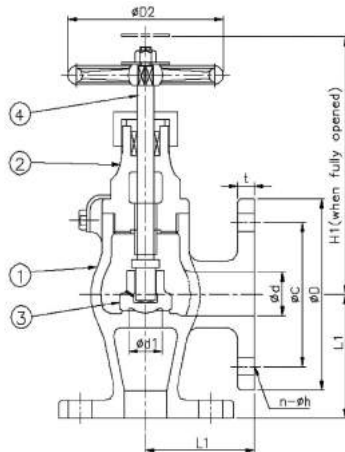
SIZE	d	L	C	D	n-h	t	H	H1	D2	F7303(Kg)	F7409(Kg)
015	15	110	70	95	4-15	12	130	130	80	2.76	2.70
020	20	120	75	100	4-15	14	140	140	100	3.72	3.63
025	25	130	90	125	4-19	14	160	155	125	5.20	5.09
032	32	160	100	135	4-19	16	170	165	125	6.91	6.77
040	40	180	105	140	4-19	16	190	185	140	8.43	8.25

SERIES F 7304 - JIS 16K Bronze Angle Valve / SERIES F 7410 - JIS 16K Bronze Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 16K



SERIES F 7304 Angle Valve



SERIES F 7410 Angle Check Valve

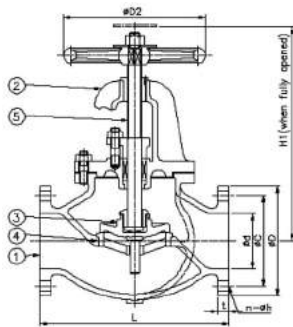
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

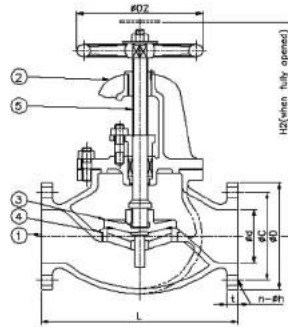
SIZE	d	L1	C	D	n-h	t	H	H1	D2	F7304(Kg)	F7410(Kg)
015	15	70	70	95	4-15	12	120	120	80	2.73	2.67
020	20	75	75	100	4-15	14	130	125	100	3.65	3.56
025	25	85	90	125	4-19	14	145	140	125	5.16	5.02
032	32	95	100	135	4-19	16	150	145	125	6.72	6.58
040	40	100	105	140	4-19	16	165	160	140	8.13	7.95

SERIES F 7305 - JIS 5K Cast Iron Globe Valve / SERIES F 7353 - JIS 5K Cast Iron Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7305 Globe Valve



SERIES F 7353 Globe Check Valve

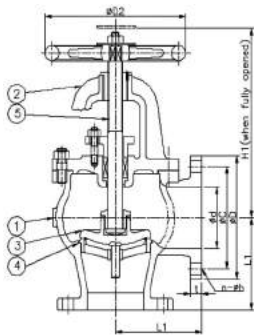
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Brass / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
300 or less	1.05 [10.5]	0.77 [7.7]
350 and More	0.9 [9.0]	0.66 [6.6]

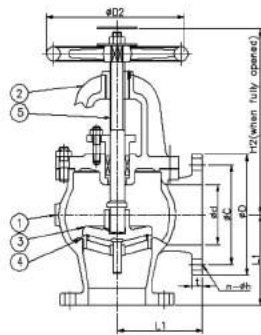
SIZE	d	L	D	C	n-h	t	H1	H2	D2	F7305(Kg)	F7353(Kg)
050	50	210	130	105	4-15	16	270	270	160	14.7	14.8
065	65	250	155	130	4-15	18	300	290	180	21.3	21.3
080	80	280	180	145	4-19	18	310	300	180	27.7	27.6
100	100	340	200	165	8-19	20	360	350	224	40.8	40.4
125	125	410	235	200	8-19	20	390	380	250	57.6	57.9
150	150	480	265	230	8-19	22	445	430	280	80.3	80.9
200	200	570	320	280	8-23	24	530	505	315	139	139
250	250	740	385	345	12-23	26	650	620	355	246	243
300	300	840	430	390	12-23	28	740	715	400	377	377
350	335	940	480	435	12-25	30	840	815	500	462	463
400	380	1050	540	495	16-25	30	940	905	560	647	643
450	430	1080	605	555	16-25	30	940	925	560	741	741

SERIES F 7306 - JIS 5K Cast Iron Angle Valve / SERIES F 7354 - JIS 5K Cast Iron Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7306 Angle Valve



SERIES F 7354 Angle Check Valve

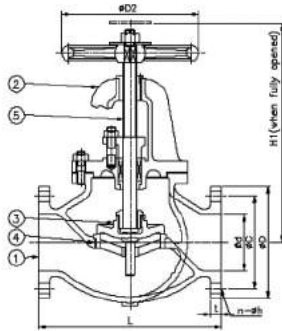
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Brass / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
300 or less	1.05 [10.5]	0.77 [7.7]
350 and More	0.9 [9.0]	0.66 [6.6]
450 or more	0.75 [7.5]	0.55 [5.5]

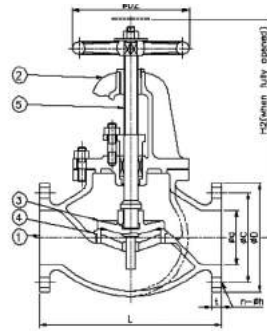
SIZE	d	L	D	C	n-h	t	H1	H2	D2	F7306(Kg)	F7354(Kg)
050	50	100	130	105	4-15	16	240	240	160	12.9	13.8
065	65	115	155	130	4-15	18	255	245	180	18.2	18.2
080	80	130	180	145	4-19	18	265	255	180	23.4	23.3
100	100	150	200	165	8-19	20	310	300	224	33.7	33.5
125	125	170	235	200	8-19	20	330	320	250	46.2	46.5
150	150	190	265	230	8-19	22	380	365	280	63.4	64.0
200	200	220	320	280	8-23	24	450	425	315	105	104
250	250	275	385	345	12-23	26	540	510	355	176	175
300	300	310	430	390	12-23	28	610	585	400	243	243
350	335	360	480	435	12-25	30	690	660	500	327	336
400	380	395	540	495	16-25	30	770	730	560	459	455
450	430	440	605	555	16-25	30	870	835	630	618	618
500	480	485	655	605	20-25	32	1020	915	710	800	800
550	530	530	720	665	20-27	32	1350	985	800	1161	1161

SERIES F 7307 - JIS 10K Cast Iron Globe Valve / SERIES F 7375 - JIS 10K Cast Iron Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7307 Globe Valve



SERIES F 7375 Globe Check Valve

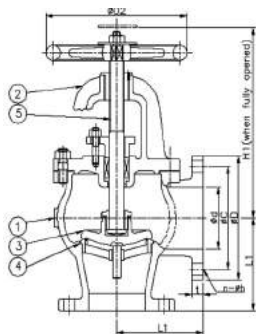
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Brass / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
200 or less	2.1 [21.0]	1.54 [15.4]
250 and More	1.5 [15.0]	1.1 [11.0]

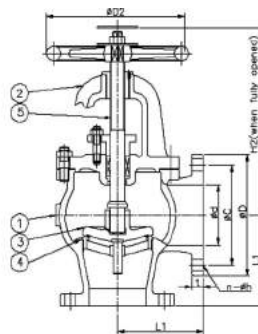
SIZE	d	L	D	C	n-h	t	H1	H2	D2	F7307(Kg)	F7375(Kg)
050	50	220	155	120	4-19	20	285	285	160	19.9	19.9
065	65	270	175	140	4-19	22	310	305	200	28.7	28.6
080	80	300	185	150	8-19	22	320	315	200	32.4	32.5
100	100	350	210	175	8-19	24	370	360	250	48.7	48.7
125	125	420	250	210	8-23	24	420	410	280	73.1	73.0
150	150	490	280	240	8-23	26	470	455	315	104	104
200	200	570	330	290	12-23	26	555	530	355	162	161
250	250	740	400	355	12-25	30	680	620	450	304	304
300	300	840	445	400	16-25	32	770	715	450	458	458
350	335	940	490	445	16-25	30	840	815	500	508	508
400	380	1050	560	510	16-27	30	940	905	560	718	718
450	430	1080	620	565	20-27	30	940	925	560	816	816

SERIES F 7308 JIS 10K Cast Iron Angle Valve / SERIES F 7376 - JIS 10K Cast Iron Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7308 Angle Valve



SERIES F 7376 Angle Check Valve

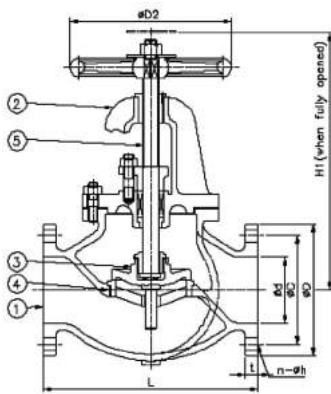
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Brass / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
200 or less	2.1 [21.0]	1.54 [15.4]
250 and More	1.5 [15.0]	1.1 [11.0]

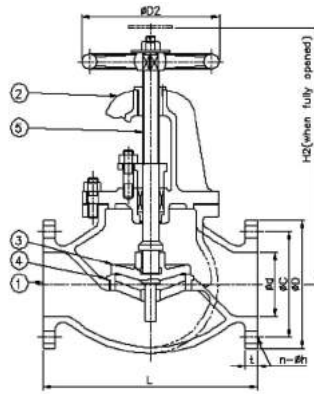
SIZE	d	L1	D	C	n-h	t	H1	H2	D2	F7308(Kg)	F7376(Kg)
050	50	120	155	120	4-19	20	255	255	160	18.2	18.2
065	65	130	175	140	4-19	22	270	260	200	25.4	25.3
080	80	140	185	150	8-19	22	275	270	200	27.4	27.5
100	100	160	210	175	8-19	24	315	305	250	40.6	40.6
125	125	180	250	210	8-23	24	360	350	280	69.9	69.8
150	150	205	280	240	8-23	26	405	390	315	81.0	81.2
200	200	230	330	290	12-23	26	475	450	355	125	124
250	250	290	400	355	12-25	30	570	570	450	211	211
300	300	320	445	400	16-25	32	645	645	450	293	293
350	335	360	490	445	16-25	34	710	710	500	386	386
400	380	395	560	510	16-27	36	790	790	560	544	544
450	430	440	620	565	20-27	30	940	870	560	680	680
500	480	485	675	620	20-27	32	1020	1020	560	880	880
550	530	530	745	680	20-33	32	1350	1350	630	1278	1278

SERIES F 7309 - JIS 16K Cast Iron Globe Valve / SERIES F 7377 - JIS 16K Cast Iron Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 16K



SERIES F 7309 Globe Valve



SERIES F 7377 Globe Check Valve

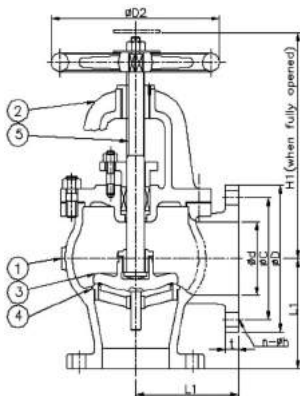
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze	/ Stainless Steel
4 - Seat	Bronze	/ Stainless Steel
5 - Stem	Brass	/ Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

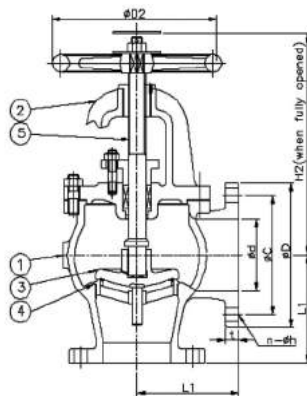
SIZE	d	L	D	C	n-h	t	H1	H2	D2	F7309(Kg)	F7377(Kg)
050	50	220	155	120	8-19	20	285	285	160	19.6	19.6
065	65	270	175	140	8-19	22	310	305	200	28.3	28.2
080	80	300	200	160	8-23	24	340	335	224	40.4	40.5
100	100	350	225	185	8-23	26	385	375	250	56.9	56.9
125	125	430	270	225	8-25	26	455	440	315	89.5	89.5
150	150	500	305	260	12-25	28	510	500	355	123	123
200	200	570	350	305	12-25	30	630	530	450	188	188

SERIES F 7310 JIS 16K Cast Iron Angle Valve / SERIES F 7378 - JIS 16K Cast Iron Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 16K



SERIES F 7310 Angle Valve



SERIES F 7378 Angle Check Valve

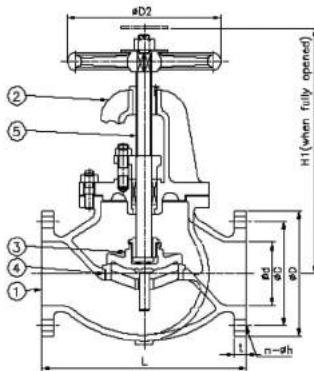
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze	/ Stainless Steel
4 - Seat	Bronze	/ Stainless Steel
5 - Stem	Brass	/ Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

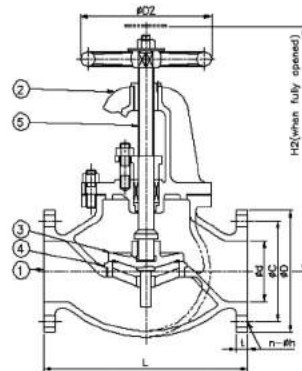
SIZE	d	L1	D	C	n-h	t	H1	H2	D2	F7310(Kg)	F7378(Kg)
050	50	120	155	120	8-19	20	255	255	160	18.0	18.0
065	65	130	175	140	8-19	22	270	260	200	25.0	24.9
080	80	150	200	160	8-23	24	295	260	224	35.7	35.8
100	100	170	225	185	8-23	26	330	290	250	49.2	49.2
125	125	200	270	225	8-25	26	390	320	315	76.1	76.1
150	150	225	305	260	12-25	28	435	375	355	103	103
200	200	250	350	305	12-25	30	540	425	450	155	155

SERIES F 7311 JIS 5K - JIS F 7305 Base Cast Steel Globe Valve / Cast Steel Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7311 Globe Valve



SERIES F 7311 Globe Check Valve

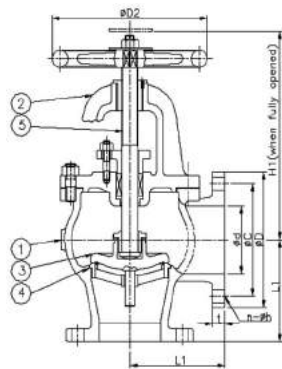
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Brass / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
300 or less	1.05 [10.5]	0.77 [0.7]
350 and More	0.9 [9.0]	0.66 [6.6]

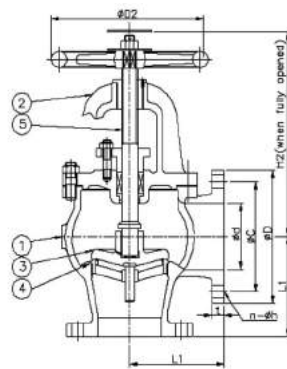
SIZE	d	L	D	C	n-h	t	H1	H2	D2	(Kg)	Check (Kg)
050	50	210	130	105	4-15	14	270	270	160	15.9	15.9
065	65	250	155	130	4-15	14	300	290	180	23.0	23.0
080	80	280	180	145	4-19	14	310	300	180	30.0	29.9
100	100	340	200	165	8-19	16	360	350	224	44.2	43.7
125	125	410	235	200	8-19	16	390	380	250	62.4	62.7
150	150	480	265	230	8-19	18	445	430	280	150.5	87.9
200	200	570	320	280	8-23	20	530	505	315	230	150.5
250	250	740	385	345	12-23	22	650	620	355	309	263.2
300	300	840	430	390	12-23	22	740	715	400	377	377
350	335	940	480	435	12-25	24	840	815	500	462	463
400	380	1050	540	495	16-25	24	940	905	560	647	643
450	430	1080	605	555	16-25	24	940	925	560	741	741

SERIES F 7312 JIS 5K - JIS F 7306 Base Cast Steel Angle Valve / Cast Steel Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7312 Angle Valve



SERIES F 7312 Angle Check Valve

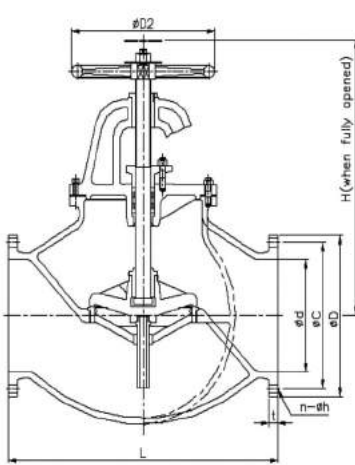
Part No.	Material	
	Class B	Class S
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Brass / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
300 or less	1.05 [10.5]	0.77 [0.7]
350 and More	0.9 [9.0]	0.66 [6.6]
450 or more	0.75 [7.5]	0.55 [5.5]

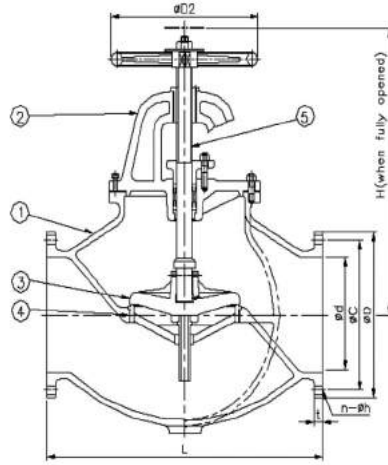
SIZE	d	L1	D	C	n-h	t	H1	H2	D2	(Kg)	Check (Kg)
050	50	100	130	105	4-15	14	240	240	160	13.9	14.0
065	65	115	155	130	4-15	14	255	245	180	19.8	19.7
080	80	130	180	145	4-19	14	265	255	180	25.3	25.2
100	100	150	200	165	8-19	16	310	300	224	36.5	36.2
125	125	170	235	200	8-19	16	330	320	250	50.0	50.3
150	150	190	265	230	8-19	18	380	365	280	88.8	69.3
200	200	220	320	280	8-23	20	450	425	315	113.7	112.6
250	250	275	385	345	12-23	22	540	510	355	178	169.5
300	300	310	430	390	12-23	22	610	585	400	275	263.2
350	335	360	480	435	12-25	24	690	660	500	327	336
400	380	395	540	495	16-25	24	770	730	560	459	455
450	430	440	605	555	16-25	24	870	835	630	618	618
500	480	485	655	605	20-25	24	1020	915	710	800	800
550	530	530	720	665	20-27	26	1350	985	800	1161	1161

SERIES F 7311 - JIS 5K Cast Steel Globe Valve / Cast Steel Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7311 Globe Valve



SERIES F 7311 Globe Check Valve

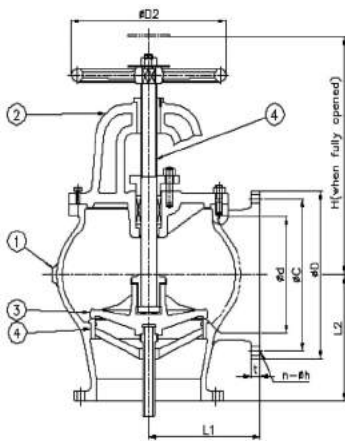
Part No.	Material	
	Class B	Class S
1 - Body	Cast Steel	
2 - Bonnet	Cast Steel	
3 - Disc	Bronze	/ Stainless Steel
4 - Seat	Bronze	/ Stainless Steel
5 - Stem	Brass	/ Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	1.04 [10.5]
Seat	0.76 [7.7]

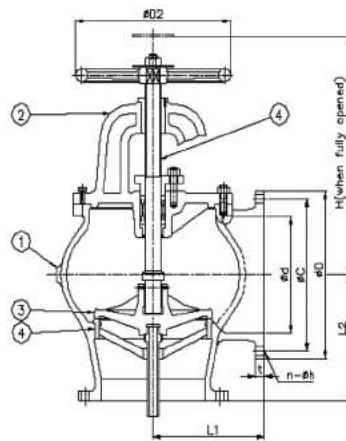
SIZE	d	L	D	C	n-h	t	H	D2	kg
250	250	740	385	345	12-23	22	791	355	230
300	300	840	430	390	12-23	22	929	400	309

SERIES F 7312 - JIS 5K Cast Steel Angle Valve / Cast Steel Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7312 Angle Valve



SERIES F 7312 Angle Check Valve

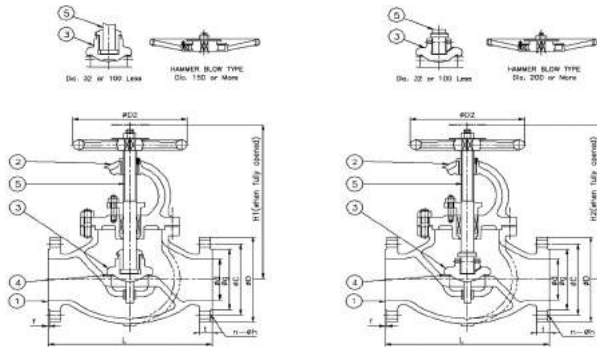
Part No.	Material	
	Class B	Class S
1 - Body	Cast Steel	
2 - Bonnet	Cast Steel	
3 - Disc	Bronze	/ Stainless Steel
4 - Seat	Bronze	/ Stainless Steel
5 - Stem	Brass	/ Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

SIZE	d	L1	L2	D	C	n-h	t	H	D2	kg
250	250	275	320	385	345	12-23	22	641	355	178
300	300	310	370	430	390	12-23	22	748	400	275

SERIES F 7313 - JIS 20K Cast Steel Globe Valve / SERIES F 7473 - JIS 20K Cast Steel Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 20K



SERIES F 7313 Globe Valve

SERIES F 7473 Globe Check Valve

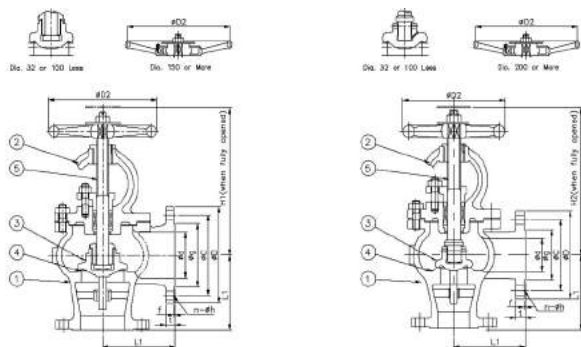
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Deposit
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	5.1 [51.0]
Seat	3.74 [37.4]

SIZE	d	L	D	C	g	n-h	t	f	H1	H2	D2	F7313(Kg)	F7473(Kg)
032	32	190	135	100	80	4-19	18	2	270	265	160	14.4	14.4
040	40	200	140	105	85	4-19	18	2	290	280	160	16.0	16.0
050	50	230	155	120	100	8-19	18	2	305	295	200	21.6	21.6
065	65	270	175	140	120	8-19	20	2	345	330	224	30.4	30.1
080	80	300	200	160	135	8-23	22	2	385	370	250	43.5	43.5
100	100	350	225	185	160	8-23	24	2	440	420	280	62.3	62.1
125	125	430	270	225	195	8-25	26	2	500	475	315	95.7	97.0
150	150	500	305	260	230	12-25	28	2	550	525	355	133.3	136
200	200	560	350	305	275	12-25	30	2	630	605	450	296.1	212
250	250	660	430	380	345	12-27	34	2	725	700	560	339.1	349
300	300	711	480	430	395	16-27	36	2	765	765	560	-	-
350	335	940	540	480	440	16-33	40	2	875	875	560	-	-
400	380	1050	605	540	495	16-33	46	2	970	970	560	-	-

SERIES F 7314 - JIS 20K Cast Steel Angle Valve / SERIES F 7474 - JIS 20K Cast Steel Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 20K



SERIES F 7314 Angle Valve

SERIES F 7474 Angle Check Valve

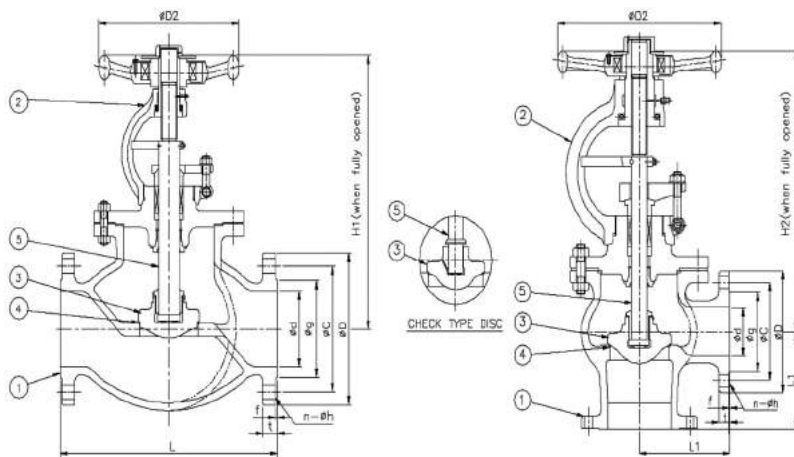
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Deposit
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	5.1 [51.0]
Seat	3.74 [37.4]

SIZE	d	L1	D	C	g	n-h	t	f	H1	H2	D2	F7314(Kg)	F7474(Kg)
032	32	100	135	100	80	4-19	18	2	250	240	160	13.0	13.0
040	40	110	140	105	85	4-19	18	2	265	255	160	15.2	15.1
050	50	125	155	120	100	8-19	18	2	275	270	200	20.0	19.9
065	65	135	175	140	120	8-19	20	2	305	295	224	26.9	26.7
080	80	150	200	160	135	8-23	22	2	340	325	250	38.9	38.8
100	100	170	225	185	160	8-23	24	2	385	365	280	54.4	54.2
125	125	200	270	225	195	8-25	26	2	440	415	315	80.7	83.0
150	150	225	305	260	230	12-25	28	2	485	460	355	112.3	115
200	200	280	350	305	275	12-25	30	2	540	520	450	183.0	189
250	250	310	430	380	345	12-27	34	2	620	595	560	285.9	296
300	300	350	480	430	395	16-27	36	2	825	825	560	-	-
350	335	380	540	480	440	16-33	40	2	875	875	560	-	-

SERIES F 7315 - JIS 30K Cast Steel Globe Valve / SERIES F 7316 - JIS 30K Cast Steel Angle Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 30K



SERIES F 7315 Globe Valve

SERIES F 7316 Angle Valve

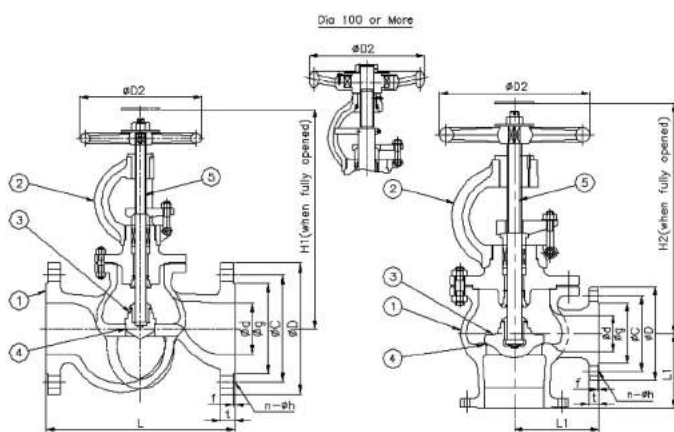
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Deposite
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	6.9 [69.0]
Seat	5.06 [50.6]

SIZE	d	L	L1	D	C	g	n-h	t	f	H1	H2	D2	F7315(Kg)	F7316 (Kg)
100	100	410	205	240	195	160	8-25	32	2	575	530	355	115.0	106.0
125	125	460	230	275	230	195	8-25	36	2	670	615	400	168.0	154.0
150	150	500	250	325	275	235	12-27	38	2	755	690	500	242.0	223.0

SERIES F 7317 - JIS 40K Cast Steel Globe Valve / SERIES F 7318 - JIS 40K Cast Steel Angle Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 40K



SERIES F 7317 Globe Valve

SERIES F 7318 Angle Valve

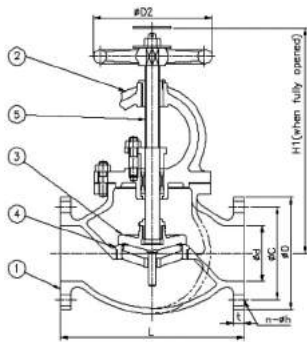
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Deposite
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	9.3 [93.0]
Seat	6.82 [68.2]

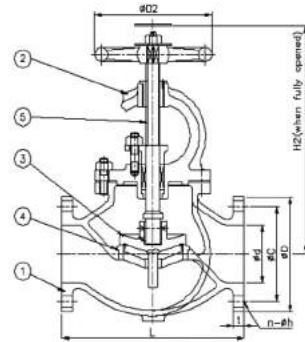
SIZE	d	L	L1	D	C	g	n-h	t	f	H1	H2	D2	F7315(Kg)	F7316 (Kg)
032	32	229	114	140	105	80	4-19	24	2	370	350	200	25.4	24.9
040	38	241	121	160	120	90	4-23	24	2	395	370	200	30.2	29.4
050	50	292	146	165	130	105	8-19	26	2	435	405	224	41.0	40.0
065	62	330	165	200	160	130	8-23	30	2	490	455	250	62.3	60.3
080	76	356	178	210	170	140	8-23	32	2	540	500	315	79.0	76.2
100	100	432	216	250	205	165	8-25	36	2	640	590	400	140.0	135.0
125	120	508	254	300	250	200	8-27	40	2	720	660	450	197.0	189.0
150	145	559	279	355	295	240	12-33	44	2	815	740	500	298.0	284.0

SERIES F 7319 - JIS 10K Cast Steel Globe Valve / SERIES F 7471 - JIS 10K Cast Steel Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7319 Globe Valve



SERIES F 7471 Globe Check Valve

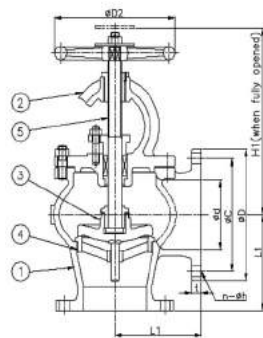
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Stainless Steel
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	2.1 [21.0]
Seat	1.54 [15.4]

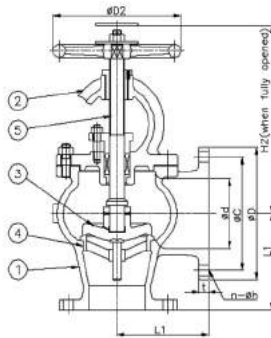
SIZE	d	L	D	C	n-h	t	H1	H2	D2	F7319(Kg)	F7471(Kg)
050	50	220	155	120	4-19	16	270	265	160	17.9	17.9
065	65	270	175	140	4-19	18	300	295	200	26.0	26.1
080	80	300	185	150	8-19	18	310	300	200	29.8	29.8
100	100	350	210	175	8-19	18	355	345	250	44.7	44.8
125	125	420	250	210	8-23	20	415	405	280	70.3	69.8
150	150	490	280	240	8-23	22	470	455	315	96.4	96.3
200	200	570	330	290	12-23	22	565	545	355	159.0	158.0
250	250	740	400	355	12-25	24	645	645	400	257.0	304.0
300	300	840	445	400	16-25	24	735	735	450	370.0	458.0
350	335	940	490	445	16-25	26	840	840	500	508.0	508.0
400	380	1050	560	510	16-27	28	940	940	560	718.0	718.0
450	430	1080	620	565	20-27	30	940	870	560	816.0	816.0

SERIES F 7320 JIS 10K Cast Steel Angle Valve / SERIES F 7472 - JIS 10K Cast Steel Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7320 Angle Valve



SERIES F 7472 Angle Check Valve

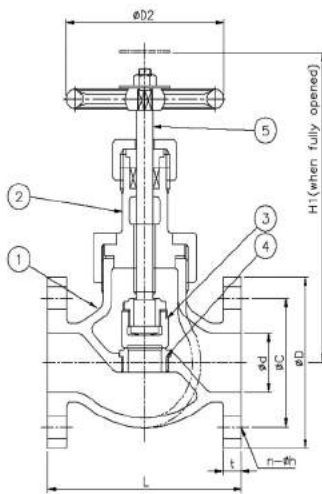
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Stainless Steel
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	2.1 [21.0]
Seat	1.54 [15.4]

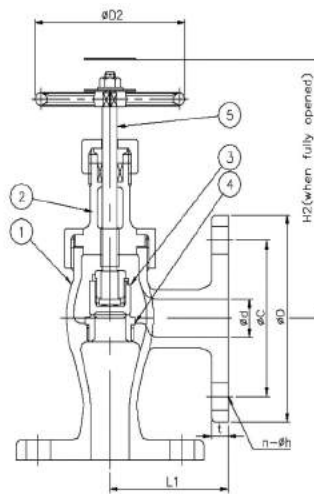
SIZE	d	L1	D	C	n-h	t	H1	H2	D2	F7320(Kg)	F7472(Kg)
050	50	120	155	120	4-19	16	240	235	160	16.3	16.3
065	65	130	175	140	4-19	18	260	250	200	23.0	23.1
080	80	140	185	150	8-19	18	265	255	200	25.3	25.3
100	100	160	210	175	8-19	18	300	290	250	37.0	37.0
125	125	180	250	210	8-23	20	350	340	280	57.1	56.6
150	150	205	280	240	8-23	22	400	385	315	77.2	77.1
200	200	230	330	290	12-23	22	480	460	355	116.0	116.0
250	250	290	400	355	12-25	24	535	570	400	188.0	188.0
300	300	320	445	400	16-25	24	610	645	450	256.0	256.0
350	335	360	490	445	16-25	26	710	710	500	386	386
400	380	395	560	510	16-27	28	790	790	560	544	544
450	430	440	620	565	20-27	30	940	870	560	680	680
500	480	485	675	620	20-27	30	1020	1020	560	880	880
550	530	530	745	680	20-33	32	1350	1350	630	1278	1278

SERIES F 7321 - JIS 5K / SERIES F 7322 - JIS 5K Malleable Iron & Ductile Iron Globe, Angle Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7321 Globe Valve



SERIES F 7322 Angle Valve

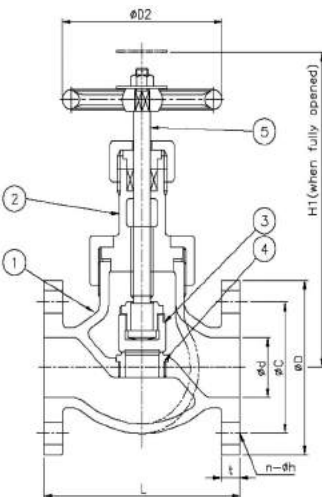
Part No.	Material	
	Class B	Class S
1 - Body	Malleable Iron / Ductile Iron	
2 - Bonnet	Malleable Iron / Ductile Iron	
3 - Disc	Bronze	/ Stainless Steel
4 - Seat	Bronze	/ Stainless Steel
5 - Stem	Bronze	/ Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

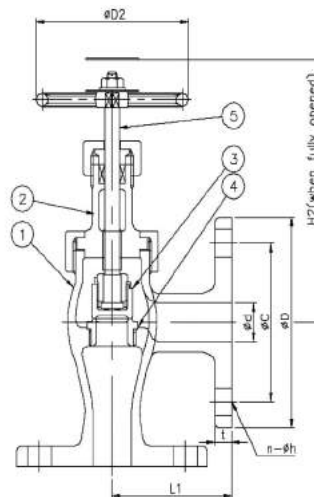
SIZE	d	L	L1	C	D	n-h	t	H1	H2	D2	F7321(Kg)	F7322(Kg)
015	15	100	55	60	80	4-12	9	145	135	80	1.98	1.88
020	20	110	60	65	85	4-12	10	160	150	100	2.80	2.65
025	25	120	65	75	95	4-12	10	185	175	125	4.18	3.85
032	32	140	80	90	115	4-15	12	195	180	125	5.53	5.29
040	40	160	85	95	120	4-15	12	215	200	140	7.08	6.86

SERIES F 7323 - JIS 16K / SERIES F 7324 - JIS 16K Malleable Iron & Ductile Iron Globe, Angle Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 16K



SERIES F 7323 Globe Valve



SERIES F 7324 Angle Valve

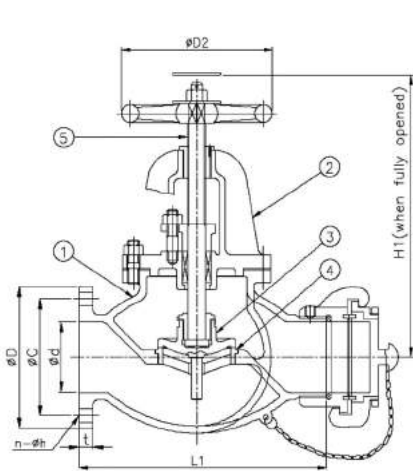
Part No.	Material	
	Class B	Class S
1 - Body	Malleable Iron / Ductile Iron	
2 - Bonnet	Malleable Iron / Ductile Iron	
3 - Disc	Bronze	/ Stainless Steel
4 - Seat	Bronze	/ Stainless Steel
5 - Stem	Bronze	/ Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

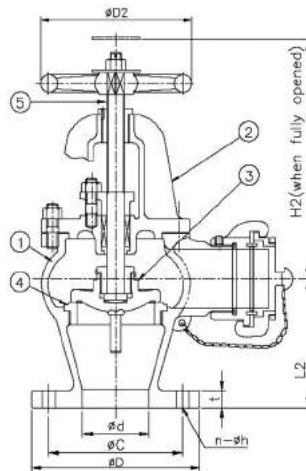
SIZE	d	L	L1	C	D	n-h	t	H1	H2	D2	F7323(Kg)	F7324(Kg)
015	15	110	70	70	95	4-15	12	145	135	80	2.91	2.85
020	20	120	75	75	100	4-15	14	160	150	100	3.85	3.75
025	25	130	85	90	125	4-19	14	185	175	125	5.57	5.36
032	32	160	95	100	135	4-19	16	195	180	125	7.40	7.05
040	40	180	100	105	140	4-19	16	215	200	140	9.29	8.80

SERIES F 7333 - JIS 5K, JIS 10K *Cast Iron Hose Globe Valve / Cast Iron Hose Angle Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K, 10K



SERIES F 7333 - Hose Globe Valve



SERIES F 7333 - Hose Angle Valve

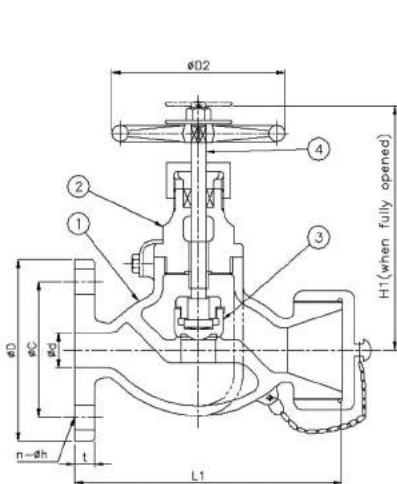
Part No.	Material	
	Class B	Class S
1 - Body	Malleable Iron / Ductile Iron	
2 - Bonnet	Malleable Iron / Ductile Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Bronze / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
Body	1.05 [10.5]	2.1 [21.0]
Seat	0.77 [7.7]	1.54 [15.4]

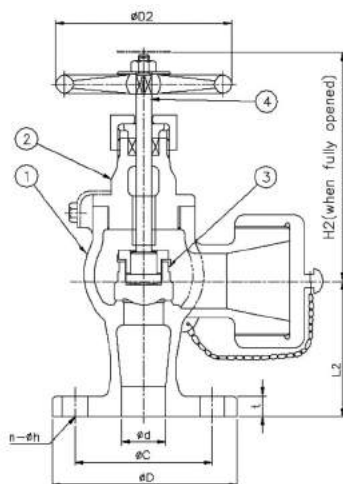
SIZE	d	L1	L2	D	C	n-h	t	H1	H2	D2	Globe(Kg)	Angle(Kg)
5K	50	215	100	130	105	4-15	16	270	240	160	14.7	12.8
	65	275	130	155	130	4-15	18	310	270	200	28.2	24.3
10K	50	225	120	155	120	4-19	20	285	255	160	18.9	17.0
	65	275	130	175	140	4-19	22	310	270	200	28.2	24.3

SERIES F 7334 - JIS 5K, JIS 10K (15A~25A) *Bronze Hose Globe Valve / Bronze Hose Angle Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 10K



SERIES F 7334 - Hose Globe Valve



SERIES F 7334 - Hose Angle Valve

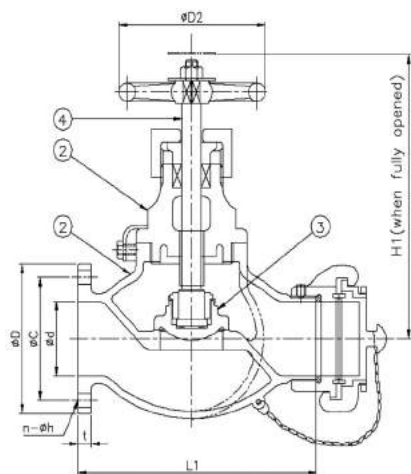
Part No.	Material
1 - Body	Cast Bronze
2 - Bonnet	Cast Bronze
3 - Disc	Bronze
4 - Stem	brass

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	5K	10K
Body	1.05 [10.5]	2.1 [21.0]
Seat	0.77 [7.7]	1.54 [15.4]

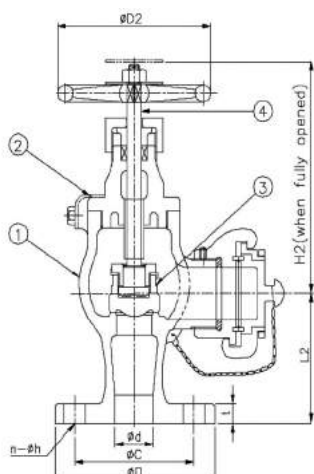
SIZE	d	L1	L2	D	C	n-h	t	H1	H2	D2	Globe(Kg)	Angle(Kg)
5K	15	110	55	80	60	4-12	9	130	120	80	2.51	2.41
	25	125	65	95	75	4-12	10	160	145	125	3.55	3.44
10K	15	115	70	95	70	4-15	12	130	120	80	2.76	2.72
	25	135	85	125	90	4-19	14	160	145	125	4.15	4.04

SERIES F 7334 - JIS 5K, JIS 10K (40A) *Bronze Hose Globe Valve / Bronze Hose Angle Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 10K



SERIES F 7334 - Hose Globe Valve



SERIES F 7334 - Hose Angle Valve

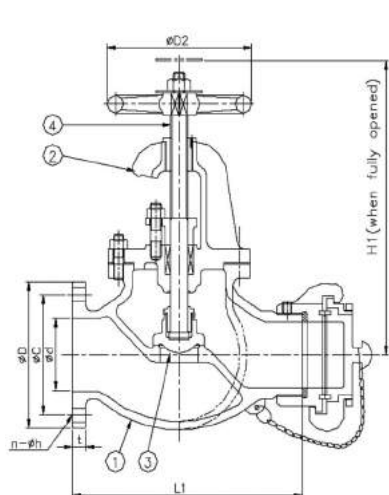
Part No.	Material
1 - Body	Cast Bronze
2 - Bonnet	Cast Bronze
3 - Disc	Bronze
4 - Stem	brass

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	5K	10K
Body	1.05 [10.5]	2.1 [21.0]
Seat	0.77 [7.7]	1.54 [15.4]

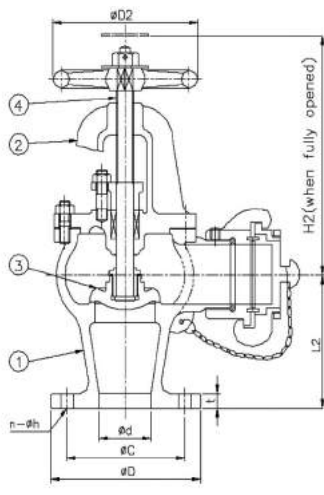
SIZE	d	L1	L2	D	C	n-h	t	H1	H2	D2	Globe(Kg)	Angle(Kg)
5K	40	160	85	120	95	4-15	12	190	165	140	6.26	5.91
10K	40	175	100	140	105	4-19	16	190	165	140	8.43	8.19

SERIES F 7334 - JIS 5K, JIS 10K (50A~65A) *Bronze Hose Globe Valve / Bronze Hose Angle Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 10K



SERIES F 7334 - Hose Globe Valve



SERIES F 7334 - Hose Angle Valve

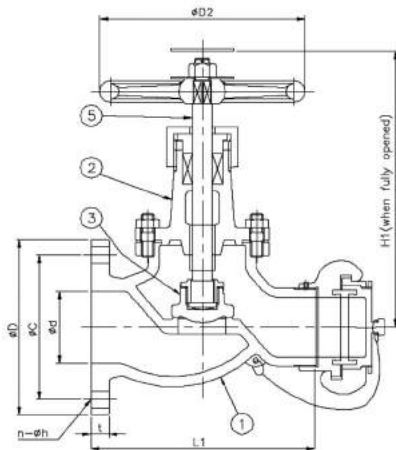
Part No.	Material
1 - Body	Cast Bronze
2 - Bonnet	Cast Bronze
3 - Disc	Bronze
4 - Stem	brass

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	5K	10K
Body	1.05 [10.5]	2.1 [21.0]
Seat	0.77 [7.7]	1.54 [15.4]

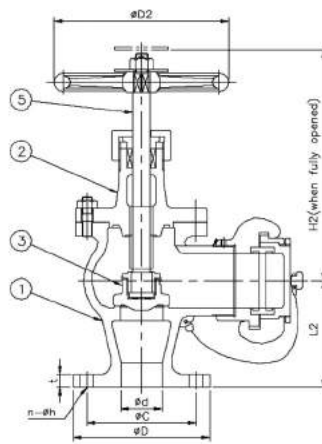
SIZE	d	L1	L2	D	C	n-h	t	H1	H2	D2	Globe(Kg)	Angle(Kg)
5K	50	210	100	130	105	4-15	14	255	225	160	12.9	11.0
	65	275	130	155	130	4-15	14	295	255	200	27.8	23.0
10K	50	220	120	155	120	4-19	16	270	240	160	15.4	14.3
	65	275	130	175	140	4-19	18	295	255	200	27.8	23.0

SERIES F 7334 Small Type - JIS 5K , JIS 10K *Bronze Hose Globe Valve / Bronze Hose Angle Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K , 10K



SERIES F 7334 - Hose Globe Valve



SERIES F 7334 - Hose Angle Valve

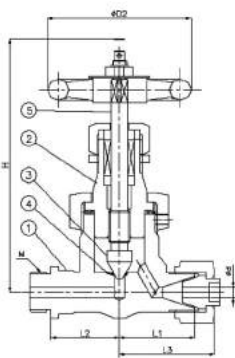
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Bronze

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	5K	10K
Body	1.05 [10.5]	2.1 [21.0]
Seat	0.77 [7.7]	1.54 [15.4]

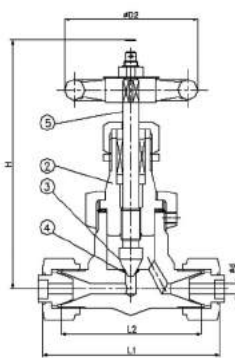
SIZE	d	L1	L2	D	C	n-h	t	H1	H2	D2
5K	50	205	120	130	105	4-15	14	233	240	140
	65	224	130	155	130	4-15	14	257	255	160
10K	50	205	120	155	120	4-19	16	233	240	140
	65	224	130	175	140	4-19	18	257	255	160

SERIES F 7336 - JIS 30K *Forged Steel Globe Air Valve*

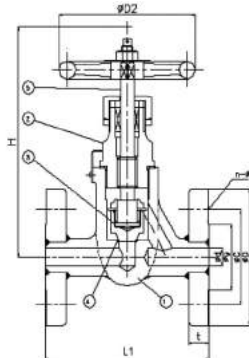
Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 30K



SERIES F 7336 - S TYPE



SERIES F 7336 - U TYPE



SERIES F 7336 - F TYPE

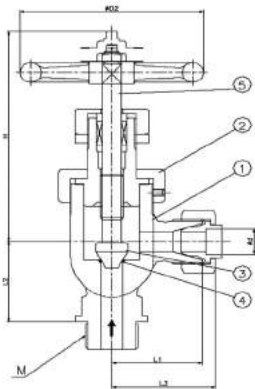
Part No.	Material
1 - Body	Forged Steel
2 - Bonnet	Forged Steel
3 - Disc	Bronze / Stainless Steel
4 - Stem	Deposite - Stainless Steel
5 - Stem	Brass / Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	6.9 [69.0]
Seat	5.06 [50.6]

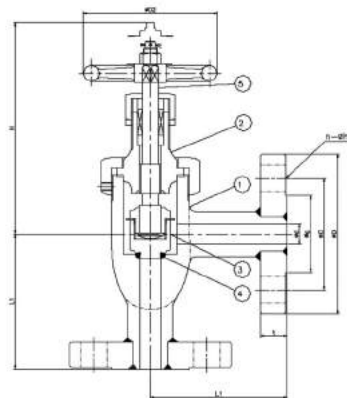
TYPE	Size	d	L1	L2	L3	D	C	n-h	t	g	M	H	D2	Kg
S	6	6	42	38	51	-	-	-	-	-	M20x1.5	130	80	1.26
	10	10	51	45	63	-	-	-	-	-	M24x2.0	150	100	1.80
U	6	6	102	84	-	-	-	-	-	-	-	130	80	1.30
	10	10	126	102	-	-	-	-	-	-	-	150	100	1.94
F	15	15	150	-	-	115	80	4-19	18	55	-	200	125	5.60
	20	20	170	-	-	120	85	4-19	18	60	-	220	140	7.09
	25	25	200	-	-	130	95	4-19	20	70	-	250	140	9.46
	32	32	220	-	-	140	105	4-19	22	80	-	300	160	-
	40	40	220	-	-	160	120	4-23	22	90	-	300	160	-

SERIES F 7337 - JIS 30K Forged Steel Angle Air Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 30K



SERIES F 7337 - S TYPE



SERIES F 7337 - F TYPE

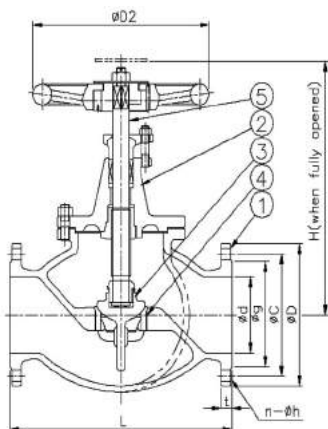
Part No.	Material
1 - Body	Forged Steel
2 - Bonnet	Forged Steel
3 - Disc	Bronze / Stainless Steel
4 - Stem	Deposite - Stainless Steel
5 - Stem	Brass / Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	6.9 [69.0]
Seat	5.06 [50.6]

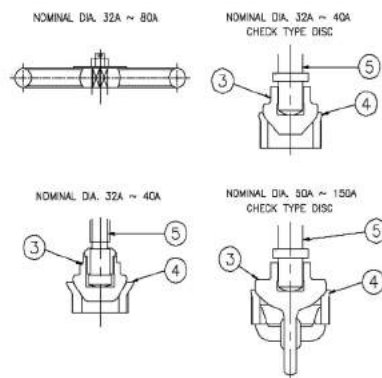
TYPE	Size	d	L1	L2	L3	D	C	n-h	t	g	M	H	D2	Kg
S	6	6	42	38	51	—	—	—	—	—	M20x1.5	115	80	1.26
	10	10	46	45	58	—	—	—	—	—	M24x2.0	130	100	1.80
	15	15	90	—	—	115	80	4-19	18	55	—	175	125	5.60
F	20	20	95	—	—	120	85	4-19	18	60	—	185	140	7.09
	25	25	100	—	—	130	95	4-19	20	70	—	210	140	9.46

SERIES F 7340 - JIS 30K Cast Steel Globe Air Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 30K



SERIES F 7340 Globe Air Valve



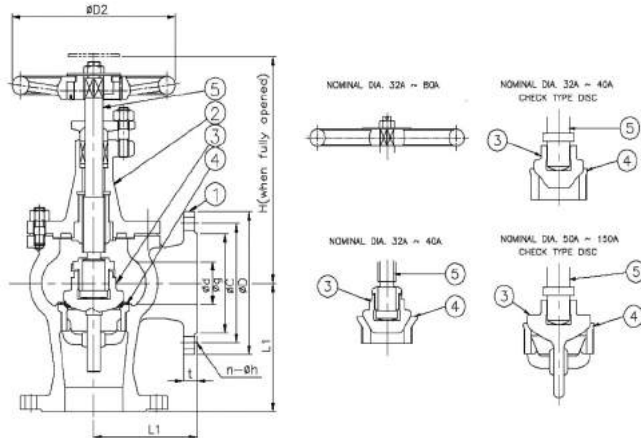
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel / High Brass Casting
4 - Stem	Stainless Steel / High Brass Casting
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	6.9 [69.0]
Seat	5.06 [50.6]

SIZE	d	L	D	C	g	n-h	t	f	H	D2	F7340(Kg)
032	32	220	140	105	80	4-19	22	2	270	180	16.7
040	40	240	160	120	90	4-23	22	2	280	180	21.1
050	50	260	165	130	105	8-19	22	2	350	224	28.8
065	65	310	200	160	130	8-23	26	2	390	250	48.7
080	80	340	210	170	140	8-23	28	2	430	280	60.9
100	100	390	240	195	160	8-25	32	2	480	315	86.0
125	125	470	275	230	195	8-25	36	2	570	400	139.0
150	150	540	325	275	235	12-27	38	2	655	450	199.0

SERIES F 7475 - JIS 30K Cast Steel Angle Air Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 30K



SERIES F 7475 Angle Air Valve

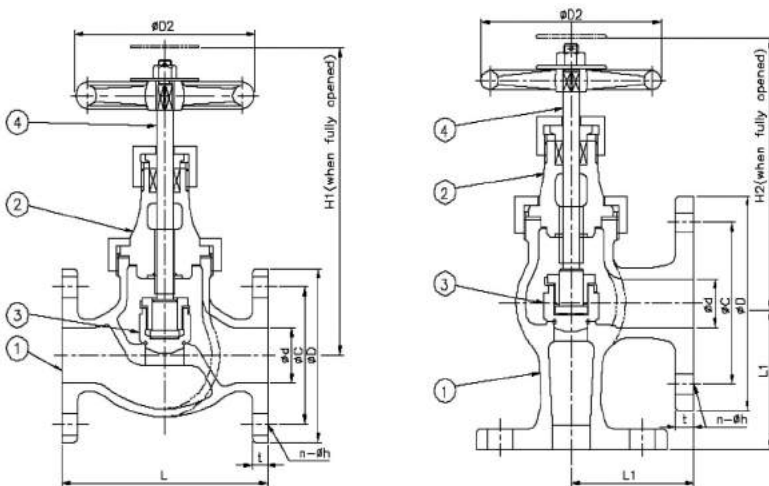
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel / High Brass Casting
4 - Stem	Stainless Steel / High Brass Casting
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	6.9 [69.0]
Seat	5.06 [50.6]

SIZE	d	L1	D	C	g	n-h	t	f	H1	D2	F7475(Kg)
032	32	114	140	105	80	4-19	22	2	245	180	16.6
040	40	121	160	120	90	4-23	22	2	255	180	20.3
050	50	146	165	130	105	8-19	22	2	310	224	27.6
065	65	165	200	160	130	8-23	26	2	340	250	46.6
080	80	178	210	170	140	8-23	28	2	380	280	55.6
100	100	205	240	195	160	8-25	32	2	435	315	80.9
125	125	230	275	230	195	8-25	36	2	510	400	126.0
150	150	250	325	275	235	12-27	38	2	585	450	177.0
200	200	300	370	320	280	12-27	42	2	685	500	258.0

SERIES F 7346 - JIS 5K / SERIES F 7347 - JIS 5K Bronze Globe Valve, Angle Valve - Union Bonnet

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7346 Globe Valve

SERIES F 7347 Angle Valve

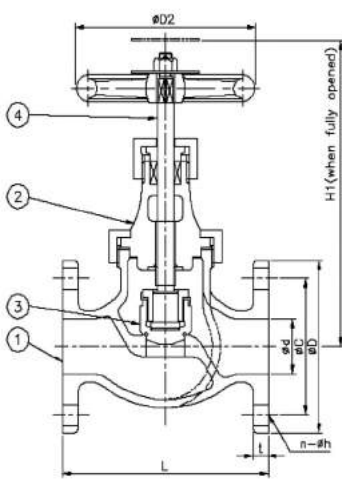
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

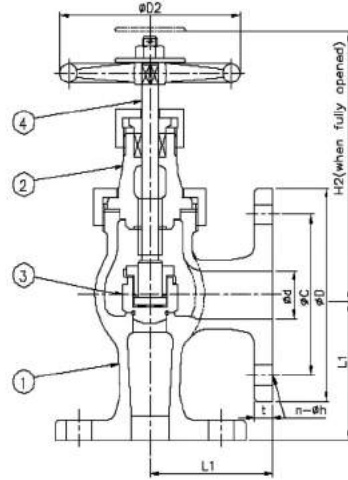
SIZE	d	L	L1	D	C	n-h	t	H1	H2	D2	F7346(Kg)	F7347(Kg)
015	15	100	55	80	60	4-12	9	155	145	80	2.21	2.15
020	20	110	60	85	65	4-12	10	165	155	100	3.04	2.94
025	25	120	65	95	75	4-12	10	185	175	125	3.97	3.82
032	32	140	80	115	90	4-15	12	195	175	125	5.23	4.99
040	40	160	85	120	95	4-15	12	210	190	140	6.94	6.40

SERIES F 7348 - JIS 16K / SERIES F 7349 - JIS 16K *Bronze Globe Valve, Angle Valve - Union Bonnet*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 16K



SERIES F 7348 Globe Valve



SERIES F 7349 Angle Valve

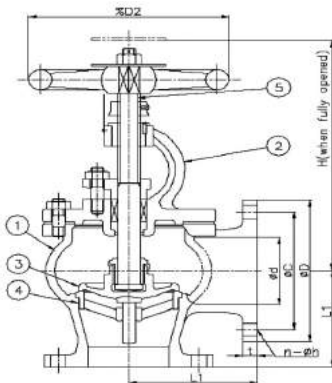
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

SIZE	d	L	L1	D	C	n-h	t	H1	H2	D2	F7348(Kg)	F7349(Kg)
015	15	110	70	95	70	4-15	12	155	145	80	2.96	2.94
020	20	120	75	100	75	4-15	14	165	155	100	3.92	3.88
025	25	130	85	125	90	4-19	14	185	175	125	5.65	5.53
032	32	160	95	135	100	4-19	16	195	175	125	7.24	6.98
040	40	180	100	140	105	4-19	16	210	190	140	9.12	8.57

SERIES F 7350 JIS 10K *Cast Steel Hull Angle Valve (50A ~ 300A)*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7350 50A~300A Hull Angle Valve

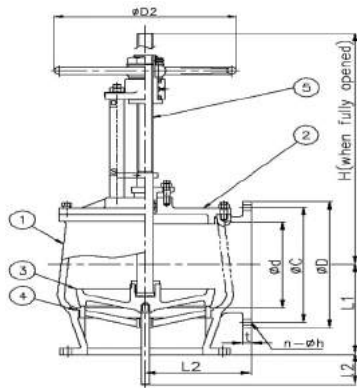
Part No.	Material	
	Class S	Class B
1 - Body	Cast Steel	
2 - Bonnet	Cast Steel	
3 - Disc	Stainless Steel, Cast Bronze	
4 - Seat	Stainless Steel, Cast Bronze	
5 - Stem	Stainless Steel, Brass	

Test Pressure MPa[Kgf/cm ²]				
Nominal Dia	Body		Seat	
	Class B	Class S	Class B	Class S
200 or less	1.1[11]		1.5[15]	
250 & 300	1.05[10.5]	1.5[15]	0.77[7.7]	1.1[11]

SIZE	d	L1	D	C	n-h	t	H	D2	Kg
050	50	120	155	120	4-19	16	265	160	16.5
065	65	130	175	140	4-19	18	290	200	23.3
080	80	140	185	150	8-19	18	300	200	25.5
100	100	160	210	175	8-19	18	340	250	37.3
125	125	180	250	210	8-23	20	400	280	57.7
150	150	205	280	240	8-23	22	455	315	78.0
200	200	230	330	290	12-23	22	555	355	117.0
250	250	290	400	355	12-25	24	625	400	190.0
300	300	320	445	400	16-25	24	720	450	258.0

SERIES F 7350 JIS 10K Cast Steel Hull Angle Valve (350A ~ 800A)

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7350 350A~800A Hull Angle Valve

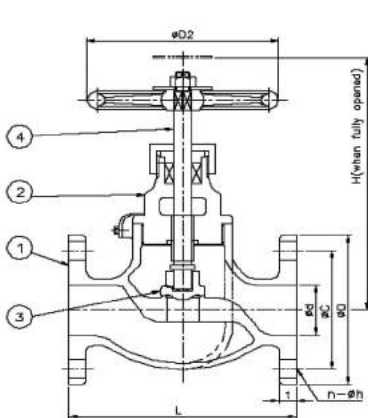
Part No.	Material	
	Class S	Class B
1 - Body	Cast Steel	
2 - Bonnet	Cast Steel	
3 - Disc	Stainless Steel , Cast Bronze	
4 - Seat	Stainless Steel , Cast Bronze	
5 - Stem	Stainless Steel , Brass	

Test Pressure MPa[Kgf/cm2]	
Body	0.5 [5]
Seat	0.25 [2.5]

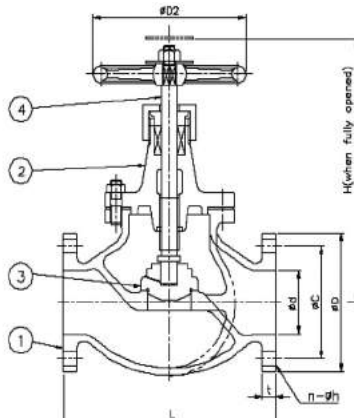
SIZE	d	L1	L2	D	C	n-h	t	I2	H	D2	Kg
350	335	360	320	490	445	16-25	26	166	1010	500	376.0
400	380	400	350	560	510	16-27	28	195	1130	600	490.0
450	430	450	380	620	565	20-27	30	218	1250	710	632.0
500	480	500	430	675	620	20-27	30	242	1380	800	839.0
550	530	550	460	745	680	20-33	32	269	1505	900	1060
600	580	610	500	795	730	24-33	32	288	1630	900	1270
650	630	660	540	845	780	24-33	34	312	1765	1000	1590
700	680	710	570	905	840	24-33	34	334	1890	1000	1930
750	730	760	610	970	900	24-33	36	357	2005	1250	2300
800	780	810	650	1020	950	28-33	36	380	2115	1250	2720

SERIES F 7351 - JIS 5K Bronze Globe Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7351 DIA 15A~40A Globe Check Valve



DIA 50A~65A Globe Check Valve

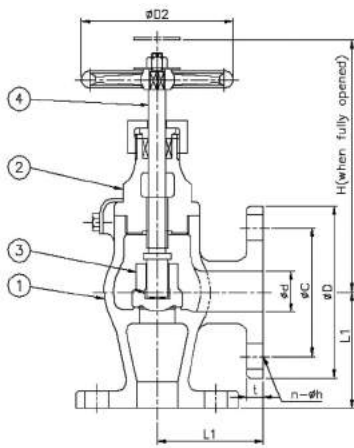
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm2]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

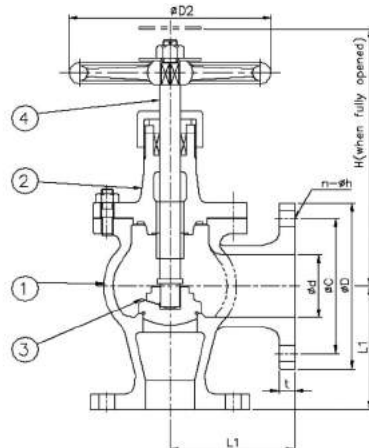
SIZE	d	L	C	D	n-h	t	H	D2	Kg
015	15	100	60	80	4-12	9	130	80	1.96
020	20	110	65	85	4-12	10	140	100	2.77
025	25	120	75	95	4-12	10	155	125	3.41
032	32	140	90	115	4-15	12	165	125	4.86
040	40	160	95	120	4-15	12	185	140	6.30
050	50	210	105	130	4-15	14	235	140	11.7
065	65	250	130	155	4-15	14	260	160	17.0

SERIES F 7352 - JIS 5K Bronze Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7301 DIA 15A~40A Angle Check Valve



DIA 50A~65A Angle Check Valve

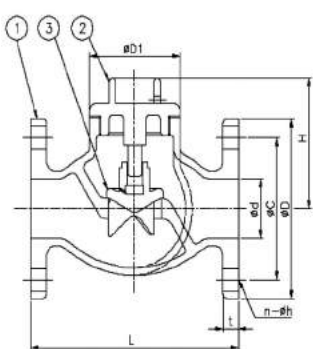
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

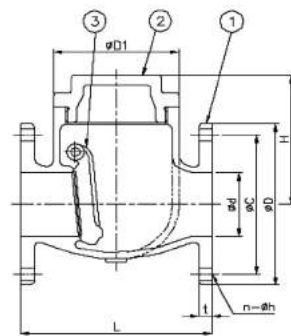
SIZE	d	L1	C	D	n-h	t	H	D2	Kg
015	15	55	60	80	4-12	9	120	80	1.92
020	20	60	65	85	4-12	10	125	100	2.64
025	25	65	75	95	4-12	10	140	125	3.30
032	32	80	90	115	4-15	12	145	125	4.63
040	40	85	95	120	4-15	12	160	140	5.81
050	50	100	105	130	4-15	14	200	140	10.1
065	65	115	130	155	4-15	14	220	160	15.6

SERIES F 7356 - JIS 5K Bronze Lift Check Valve / SERIES F 7371 - JIS 5K Bronze Swing Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7356 Lift Check Valve



SERIES F 7371 Swing Check Valve

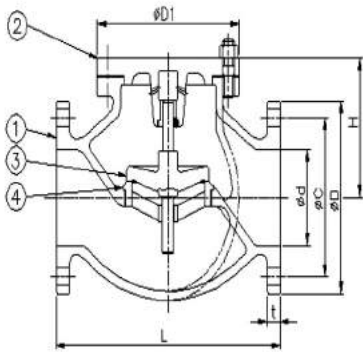
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

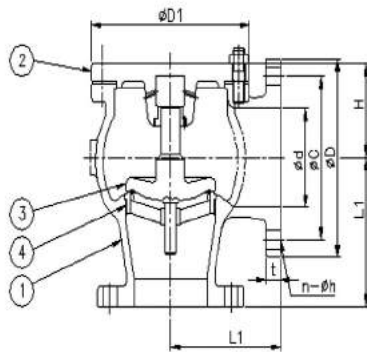
Type	Size	d	L	C	D	n-h	t	H	D1	Kg
Lift Check	010	15	100	55	75	4-12	9	61	45	2.02
	015	15	100	60	80	4-12	9	61	45	2.02
	020	20	110	65	85	4-12	10	72	52	2.39
	025	25	120	75	95	4-12	10	77	52	2.39
	032	32	140	90	115	4-15	12	81	65	3.80
	040	40	160	95	120	4-15	12	91	70	4.95
Swing Check	015	25	110	60	80	4-12	10	69	58	2.24
	020	25	110	65	85	4-12	10	69	58	2.24
	025	25	110	75	95	4-12	10	69	58	2.24
	032	32	130	90	115	4-15	12	79	66	3.07
	040	40	140	95	120	4-15	12	93	75	4.34

SERIES F 7358 - JIS 5K / SERIES F 7359 - JIS 5K Cast Iron Lift Globe Check, Lift Angle Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7358 Globe Lift Check Valve



SERIES F 7359 Angle Lift Check Valve

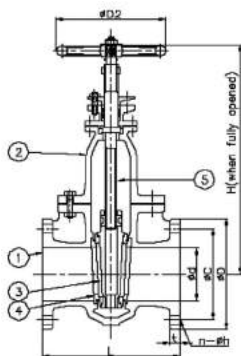
Part No.	Material
1 - Body	Cast Iron
2 - Bonnet	Cast Iron
3 - Disc	Bronze
4 - Seat	Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

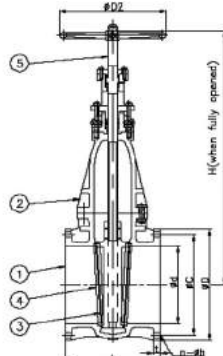
SIZE	d	L	L1	C	D	n-h	t	H	H1	D2	F7358 (Kg)	F7359 (Kg)
050	50	210	100	105	130	4-15	16	107	77	140	11.3	9.5
065	65	250	115	130	155	4-15	18	124	81	160	16.8	13.8
080	80	280	130	145	180	4-19	18	129	84	190	23.2	18.9
100	100	340	150	165	200	8-19	20	146	96	215	32.5	25.6
125	125	410	170	200	235	8-19	20	166	108	245	48.1	36.7
150	150	480	190	230	265	8-19	22	188	125	270	67.9	50.9
200	200	570	220	280	320	8-23	24	235	157	335	109	95.0

SERIES F 7360 JIS 10K Cast Steel Hull Gate Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7360 (Size 50A~400A) Gate Valve



SERIES F 7360 (Size 450A~500A) Gate Valve

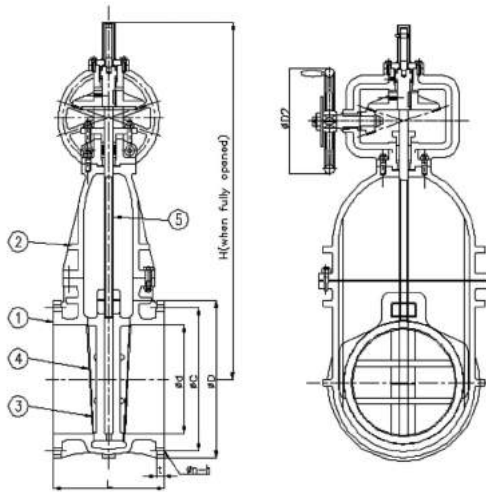
Part No.	Material	
	Class S	Class B
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Bronze / Stainless Steel	
4 - Seat	Bronze / Stainless Steel	
5 - Stem	Brass / Stainless Steel	

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	Body	Seat
400 or less	1.5 [15]	1.1 [11]
450 and More	0.5 [5]	0.25 [2.5]

SIZE	d	L	D	C	n-h	T	H	D2	Kg
050	50	200	155	120	4-19	16	300	140	17.1
065	65	220	175	140	4-19	18	350	160	26.5
080	80	230	185	150	8-19	18	400	180	31.5
100	100	250	210	175	8-19	18	450	200	44.9
125	125	270	250	210	8-23	20	520	224	63.2
150	150	290	280	240	8-23	22	580	250	82.3
200	200	310	330	290	12-23	22	700	315	130
250	250	340	400	355	12-25	24	840	400	203
300	300	380	445	400	16-25	24	960	450	291
350	335	420	490	445	16-25	26	1050	500	368
400	380	480	560	510	16-27	28	1150	560	507
450	430	450	620	565	20-27	30	1300	450	580
500	480	500	675	620	20-27	30	1420	500	735

SERIES F 7360 JIS 10K Cast Steel Hull Gate Valve - Worm Gear Type

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7360 (Size 550~800A) Ball Bearing Gate Valve

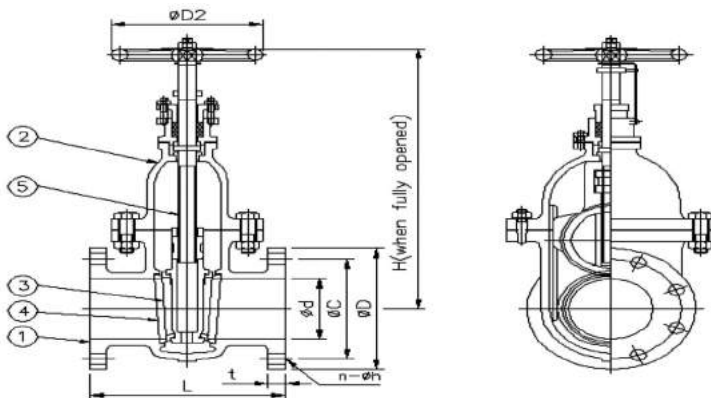
Part No.	Material	
	Class S	Class B
1 - Body	Cast Steel	
2 - Bonnet	Cast Steel	
3 - Disc	Stainless Steel / Bronze	
4 - Seat	Stainless Steel / Bronze	
5 - Stem	Stainless Steel / Brass	

Test Pressure MPa[Kgf/cm ²]		
Body	0.5 [5]	
Seat	0.25 [2.5]	

SIZE	d	L	D	C	n-h	t	H	D2	Kg
550	530	550	745	680	20-33	32	1550	500	930
600	580	600	795	730	24-33	32	1650	500	1120
650	630	650	845	780	24-33	34	1750	560	1330
700	680	700	905	840	24-33	34	1850	560	1590
750	730	750	970	900	24-33	36	1950	630	1950
800	780	800	1020	950	28-33	36	2050	630	2260

SERIES F 7363 JIS 5K Cast Iron & Cast Steel Gate Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7363 (Size 50~400A) Gate Valve

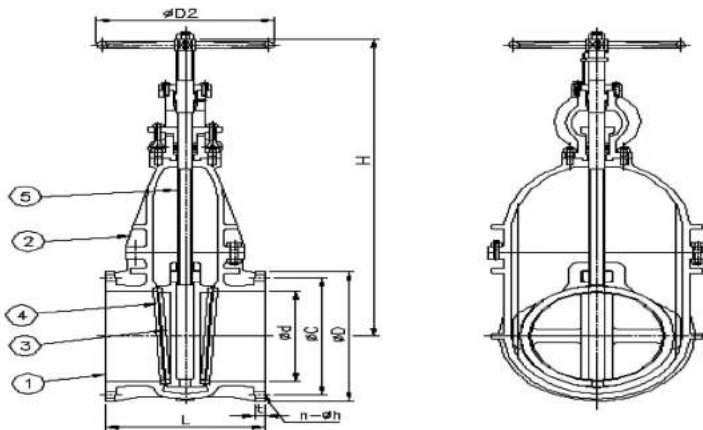
Part No.	Material	
	Class S	Class B
1 - Body	Cast Iron / Cast Steel	
2 - Bonnet	Cast Iron / Cast Steel	
3 - Disc	Stainless Steel / Bronze	
4 - Seat	Stainless Steel / Bronze	
5 - Stem	Stainless Steel / Bronze	

Test Pressure MPa[Kgf/cm ²]		
SIZE	Body	Seat
400 or less	1.05 [10.5]	0.77 [7.7]

SIZE	d	L	D	C	n-h	t		H	D2	Kg
						FC	SC			
050	50	180	130	105	4-15	16	14	285	125	13.5
065	65	190	155	130	4-15	18	14	330	140	19.0
080	80	200	180	145	4-19	18	14	380	160	24.2
100	100	230	200	165	8-19	20	16	430	180	35.3
125	125	250	235	200	8-19	20	16	495	200	48.1
150	150	270	265	230	8-19	22	18	560	224	65.3
200	200	290	320	280	8-23	24	20	680	280	103
250	250	330	385	345	12-23	26	22	800	355	164
300	300	370	430	390	12-23	28	22	920	400	236
350	335	410	480	435	12-25	30	24	1000	450	307
400	380	470	540	495	16-25	30	24	1100	500	405

SERIES F 7363 JIS 5K Cast Iron & Cast Steel Gate Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES F 7363 (Size 450~600A) Gate Valve

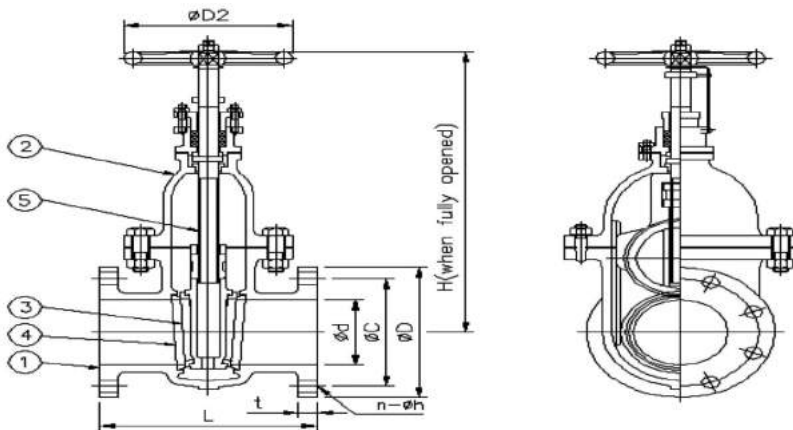
Part No.	Material	
	Class S	Class B
1 - Body	Cast Iron / Cast Steel	
2 - Bonnet	Cast Iron / Cast Steel	
3 - Disc	Stainless Steel / Bronze	
4 - Seat	Stainless Steel / Bronze	
5 - Stem	Stainless Steel / Brass	

Test Pressure MPa[Kgf/cm ²]		
SIZE	Body	Seat
450 or less	0.75 [7.5]	0.55 [5.5]

SIZE	d	L	D	C	n-h	t		H	D2	Kg
						FC	SC			
450	430	500	605	555	16-25	30	24	1420	560	556
500	480	550	655	605	20-25	32	24	1500	560	700
550	530	600	720	665	20-27	32	26	1650	630	878
600	580	660	770	715	20-27	32	26	1680	710	1120

SERIES F 7364 JIS 10K Cast Iron Gate Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7364 (Size 50A~400A) Gate Valve

SERIES F 7364 (Size 450A~600A) Gate Valve

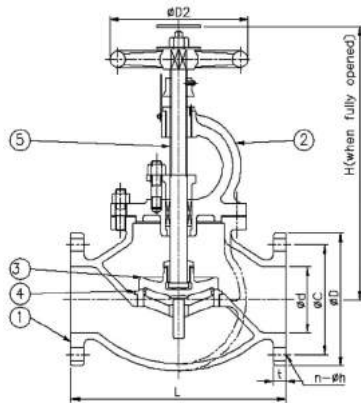
Part No.	Material	
	Class S	Class B
1 - Body	Cast Iron	
2 - Bonnet	Cast Iron	
3 - Disc	Stainless Steel / Bronze	
4 - Seat	Stainless Steel / Bronze	
5 - Stem	Stainless Steel / Brass	

Test Pressure MPa[Kgf/cm ²]		
SIZE	Body	Seat
400 or less	2.1 [21.0]	1.54 [15.4]
450 or more	1.8 [18.0]	1.32 [13.2]

SIZE	d	L	D	C	n-h	t	H	D2	Kg
050	50	200	155	120	4-19	20	300	140	19.4
065	65	220	175	140	4-19	22	350	160	27.6
080	80	230	185	150	8-19	22	400	180	33.0
100	100	250	210	175	8-19	24	450	200	45.8
125	125	270	250	210	8-23	24	520	224	65.9
150	150	290	280	240	8-23	26	580	250	86.0
200	200	320	330	290	12-23	26	700	315	136
250	250	380	400	355	12-25	30	840	400	230
300	300	440	445	400	16-25	32	960	450	331
350	335	500	490	445	16-25	34	1050	500	433
400	380	590	560	510	16-27	36	1150	560	597
450	430	640	620	565	20-27	38	1208	560	704
500	480	710	675	620	20-27	40	1320	560	901
550	530	780	745	680	20-33	42	1320	630	1192
600	580	850	795	730	24-33	44	1680	710	1490

Series F 7365 - JIS 10K Cast Steel Hull Globe Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7365 Hull Globe Valve

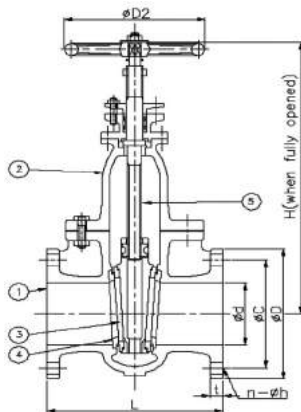
Part No.	Material	
	Class S	Class B
1 - Body	Cast Steel	
2 - Bonnet	Cast Steel	
3 - Disc	Stainless Steel / Bronze	
4 - Seat	Stainless Steel / Bronze	
5 - Stem	Stainless Steel / Brass	

Test Pressure MPa[Kgf/cm ²]				
SIZE	Body		Seat	
	Class B	Class S	Class B	Class S
200 or less	1.5 [15]		1.1 [11]	
250 or more	10.5[1.06]	1.47[15]	0.76[7.7]	1.08[11]

SIZE	d	L	D	C	n-h	t	H	D2	Kg
050	50	220	155	120	4-19	16	295	160	18.1
065	65	270	175	140	4-19	18	330	200	26.3
080	80	300	185	150	8-19	18	345	200	30.0
100	100	350	210	175	8-19	18	395	250	45.1
125	125	420	250	210	8-23	20	465	280	70.9
150	150	490	280	240	8-23	22	525	315	97.2
200	200	570	330	290	12-23	22	640	335	160
250	250	740	400	355	12-25	24	735	400	259
300	300	840	445	400	16-25	24	845	450	372
350	335	940	490	445	16-25	30	952	500	513
400	380	1050	560	510	16-27	30	1150	560	780
450	430	1080	620	565	20-27	30	1300	560	890

SERIES F 7366 JIS 10K Cast Steel Gate Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES F 7366 10K Gate Valve

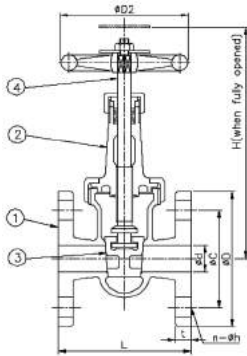
Part No.	Material	
	Class S	Class B
1 - Body	Cast Steel	
2 - Bonnet	Cast Steel	
3 - Disc	Stainless Steel / Bronze	
4 - Seat	Stainless Steel / Bronze	
5 - Stem	Stainless Steel / Brass	

Test Pressure MPa[Kgf/cm ²]	
Body	2.1 [21.0]
Seat	1.54 [15.4]

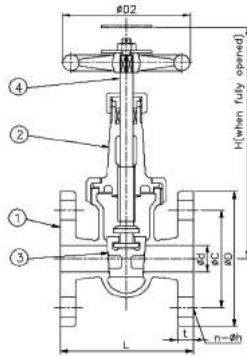
SIZE	d	L	D	C	n-h	t	H	D2	Kg
050	50	200	155	120	4-19	16	300	140	17.1
065	65	220	175	140	4-19	18	350	160	26.5
080	80	230	185	150	8-19	18	400	180	31.5
100	100	250	210	175	8-19	18	450	200	44.9
125	125	270	250	210	8-23	20	520	224	63.2
150	150	290	280	240	8-23	22	580	250	82.3
200	200	310	330	290	12-23	22	700	315	130
250	250	340	400	355	12-25	24	840	400	203
300	300	380	445	400	16-25	24	960	450	291
350	335	420	490	445	16-25	26	1050	500	368
400	380	480	560	510	16-27	28	1150	560	507

SERIES F 7367 - JIS 5K / SERIES F 7368 - JIS 10K *Bronze Gate Valve (Rising Stem)*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 10K



SERIES F 7367 5K Gate Valve



SERIES F 7368 10K Gate Valve

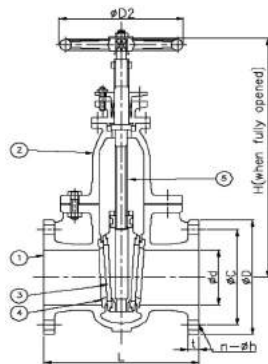
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]		
SIZE	Body	Seat
5K	1.5 [10.5]	0.77 [7.7]
10K	2.1 [21.0]	1.54 [15.4]

Size		d	L	D	C	n-h	t	H	D2	Kg
F 7367 -5K	015	15	90	80	60	4-12	9	175	80	2.29
	020	20	100	85	65	4-12	10	200	80	2.98
	025	25	110	95	75	4-12	10	220	100	4.10
	032	32	130	115	90	4-15	12	250	100	5.79
	040	40	140	120	95	4-15	12	290	125	7.78
F 7368 -10K	015	15	100	95	70	4-15	12	175	80	2.96
	020	20	110	100	75	4-15	14	200	80	3.89
	025	25	120	125	90	4-19	14	220	100	5.82
	032	32	140	135	100	4-19	16	250	100	7.52
	040	40	150	140	105	4-19	16	290	125	9.71

SERIES F 7369 JIS 16K *Cast Iron & Cast Steel Gate Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 16K



SERIES F 7369 Gate Valve

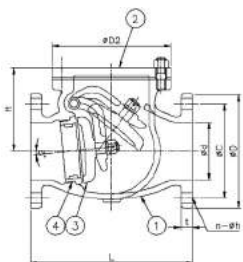
Part No.	Material	
	Class S	Class B
1 - Body	Cast Iron / Cast Steel	
2 - Bonnet	Cast Iron / Cast Steel	
3 - Disc	Stainless Steel / Bronze	
4 - Seat	Stainless Steel / Bronze	
5 - Stem	Stainless Steel / Brass	

Test Pressure MPa[Kgf/cm ²]	
Body	2.4 [24.0]
Seat	1.76 [17.6]

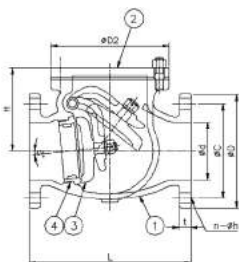
SIZE	d	L	D	C	n-h	t		H	D2	Kg
						FC	SC			
050	50	210	155	120	8-19	20	16	300	140	17.1
065	65	240	175	140	8-19	22	18	350	160	26.5
080	80	260	200	160	8-23	24	20	400	180	31.5
100	100	290	225	185	8-23	26	22	450	200	44.9
125	125	310	270	225	8-25	26	22	520	224	63.2
150	150	330	305	260	12-25	28	24	580	250	82.3
200	200	370	350	305	12-25	30	26	700	315	130
250	250	430	430	380	12-27	34	28	840	400	203
300	300	490	480	430	16-27	36	30	1010	560	430
350	335	540	540	480	16-33	38	34	1070	560	580
400	380	610	605	540	16-33	42	38	1185	630	780

SERIES F 7372 - JIS 5K / SERIES F 7373 - JIS 10K Cast Iron Swing Check Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 10K



SERIES F 7372 5K Swing Check Valve3



SERIES F 7373 10K Swing Check Valve

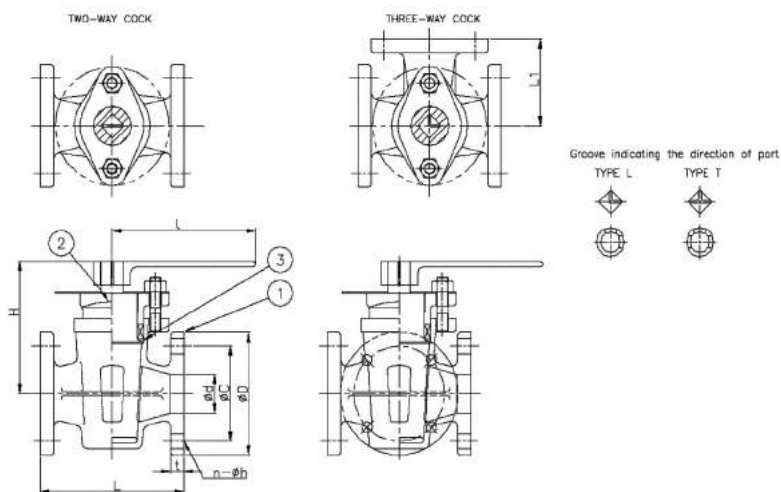
Part No.	Material
1 - Body	Cast Iron
2 - Bonnet	Cast Iron
3 - Disc	Bronze
4 - Seat	Bronze

Test Pressure MPa[Kgf/cm ²]		
SIZE	5K	10K
Body	1.05 [10.5]	2.1 [21.0]
Seat	0.77 [7.7]	1.54 [15.4]

Size	d	L	C	D	n-h	t	H	D2	Kg	
F 7372 -5K	050	50	190	105	130	4-15	16	97	135	9.06
	065	65	220	130	155	4-15	18	119	155	13.9
	080	80	250	145	180	4-19	18	129	185	19.1
	100	100	280	165	200	8-19	20	146	205	27.1
	125	125	330	200	235	8-19	20	171	235	39.0
	150	150	380	230	265	8-19	22	198	265	53.7
	200	200	460	280	320	8-23	24	235	330	94.4
	250	250	550	345	385	12-23	26	290	390	150
300	300	700	390	430	12-23	28	290	470	-	
F 7373 -10K	050	50	210	120	155	4-19	20	109	150	13.6
	065	65	240	140	175	4-19	22	126	170	19.6
	080	80	270	150	185	8-19	22	136	185	22,6100
	100	100	300	175	210	8-19	24	153	205	30.9
	125	125	350	210	250	8-23	24	180	250	49.2
	150	150	400	240	280	8-23	26	205	275	64.9
	200	200	480	290	330	12-23	26	242	330	103
	250	250	550	355	400	12-25	30	290	390	-
	300	300	700	400	445	16-25	32	290	470	-
350	335	787	445	490	16-25	34	-	-	-	

SERIES F 7381 - JIS 5K Bronze Cock Valve - 2Way & 3Way

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7381 Cock Valve

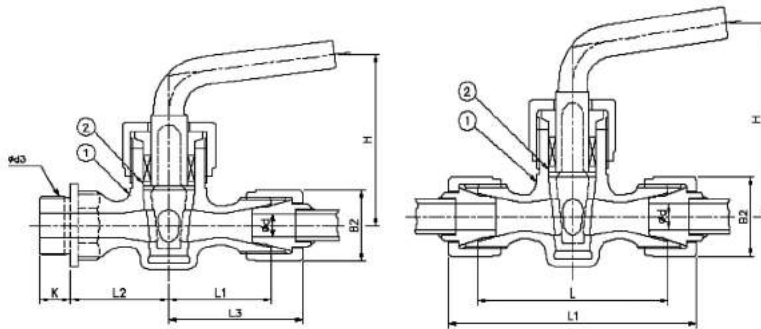
Part No.	Material
1 - Body	Bronze
2 - Plug	Bronze
3 - Seat Ring	Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	0.75 [7.5]
plug	0.55 [5.5]

SIZE	d	L	L1	C	D	n-h	t H	I	2Way Kg	3Way	kg
025	25	130	65	75	95	4-12	10	105	160	3.13	3.81
032	32	160	80	90	115	4-15	12	125	180	5.02	6.31
040	40	170	85	95	120	4-15	12	135	190	6.66	7.93
050	50	190	95	105	130	4-15	14	163	200	10	11.8
065	65	220	110	130	155	4-15	14	201	250	16.7	19

SERIES F 7387 - JIS 16K *Bronze Cock Valve - S & U TYPE*

Manufactured in accordance to JIS F 7400



SERIES F 7387 "S" Type

SERIES F 7387 "U" Type

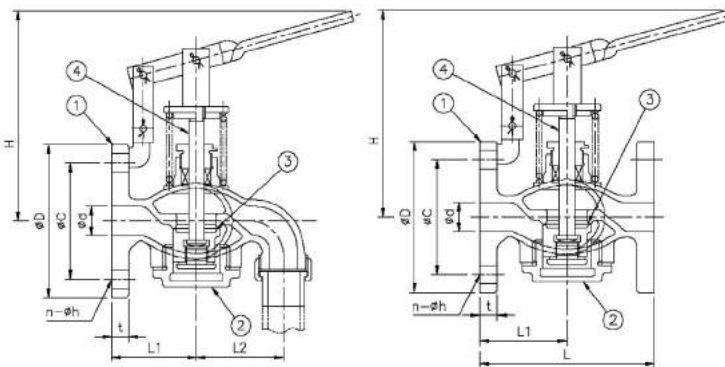
Part No.	Material
1 – Body	Bronze
2 – Bonnet	Bronze

Test Pressure MPa[Kgf/cm ²]		
Nominal Dia	BODY	PLUG
6 AND 10	3[30.0]	2.20[22.0]
15 AND 20	2.4[24.0]	1.76[17.6]

TYPE	Size	Size		L	L1	L2	L3	K	d3	B2	H
		Copper	Steel								
S TYPE	6	8/10	10.5	—	28	28	37	12	M20x1.5	30	65
	10	15	17.3	—	35	35	52	16	M24x2.0	41	73
	15	20	21.7	—	45	45	58	22	M30x2.0	46	92
	20	25	27.2	—	50	50	65	24	M36x2.0	50	104
U TYPE	6	8/10	10.5	56	74	—	—	—	—	30	65
	10	15	17.3	80	104	—	—	—	—	41	73

SERIES F 7398 - JIS 5K, 10K *Bronze Self Closing Drain Valve - F & U Type*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 – 5K, 10K



SERIES F 7398 – "U" Type

SERIES F 7398– "F" Type

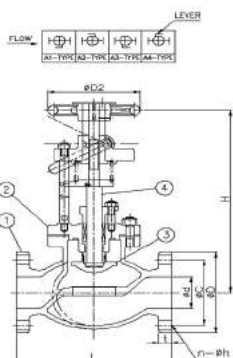
Part No.	Material
1 – Body	Bronze
2 – Bonnet	Bronze
3 – Disc	Bronze
4 – Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	0.15 [1.5]
Seat	0.11 [1.1]

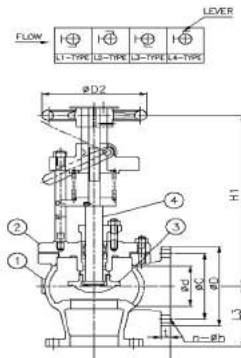
	Size	d	D	C	n-h	t	L	L1	L2	H
F7398 –5K	015	15	80	60	4-12	10	105	52.5	52.5	110
	020	20	85	65	4-12	10	130	65	65	140
	025	25	95	75	4-12	10	130	65	65	140
	040	40	120	95	4-15	12	180	90	100	235
	050	50	130	105	4-15	14	220	110	130	275
F7398 –10K	015	15	95	70	4-15	12	105	52.5	52.5	110
	020	20	100	75	4-15	14	130	65	65	140
	025	25	125	90	4-19	14	130	65	65	140
	040	40	135	105	4-19	16	180	90	100	235
	050	50	155	120	4-19	16	220	110	130	275

SERIES F 7399 - JIS 5K , 16K Emergency Shut-Off Valves - A & L Type

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 16K



SERIES F 7399 - "A" Type



SERIES F 7399 - "L" Type

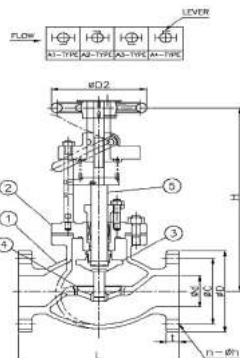
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	0.7 [7.0]
Seat	0.2 [2.0]

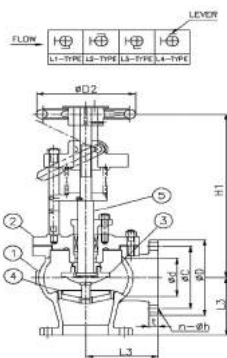
Size		d	D	C	n-h	t	H	H1	L	L3	D2
F 7399 -5K	015	15	80	60	4-12	9	260	240	110	75	120
	020	20	85	65	4-12	10	253	250	120	85	120
	025	25	95	75	4-12	10	253	250	120	85	140
	032	32	115	90	4-15	12	290	275	160	100	140
	040	40	120	95	4-15	12	290	275	160	100	140
F 7399 -10K	015	15	95	70	4-15	12	260	240	110	75	120
	020	20	100	75	4-15	14	253	250	130	85	120
	025	25	125	90	4-19	14	253	250	130	85	140
	032	32	135	100	4-19	16	290	275	170	100	140
	040	40	145	105	4-19	16	290	275	170	100	140

SERIES F 7399 - JIS 5K , 10K Emergency Shut-Off Valves - A & L Type

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 10K



SERIES F 7399 - "A" Type



SERIES F 7399 - "L" Type

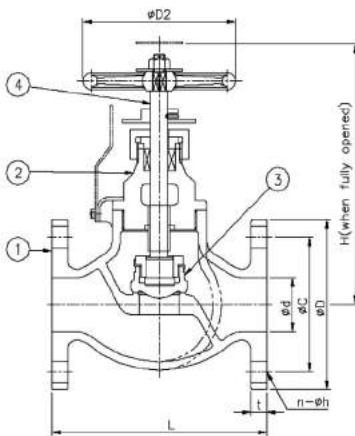
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Stainless Steel
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm ²]	
Body	0.7 [7.0]
Seat	0.2 [2.0]

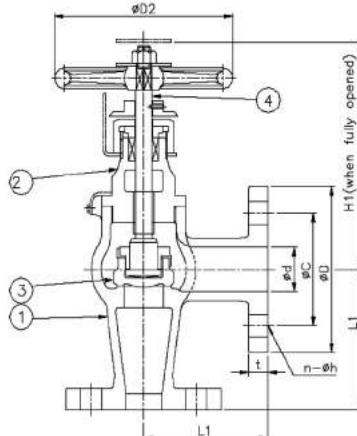
Size		d	D	C	n-h	t	H	H1	L	L3	D2
F7399 -5K	050	50	130	105	4-15	16	335	305	220	120	160
	065	65	155	130	4-15	18	395	355	270	130	180
	080	80	180	145	4-19	18	420	370	300	140	180
	100	100	200	165	8-19	18	510	450	350	160	224
	125	125	235	200	8-19	20	570	515	420	180	250
	150	150	265	230	8-19	22	595	575	490	205	280
	200	200	320	280	8-23	22	625	605	570	230	315
F7399 -10K	050	50	155	120	4-19	16	335	305	220	120	160
	065	65	175	140	4-19	18	395	355	270	130	180
	080	80	185	150	8-19	18	420	370	300	140	180
	100	100	210	175	8-19	18	510	450	350	160	224
	125	125	250	210	8-23	20	570	515	420	180	250
	150	150	280	240	8-23	22	595	575	490	205	280
	200	200	330	290	12-23	22	625	605	570	230	315

SERIES F 7403 - JIS 16K Bronze Hull Globe Valve / SERIES F 7404 - JIS 16K Bronze Hull Angle Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 16K



SERIES F 7403 Hull Globe Valve



SERIES F 7404 Hull Angle Valve

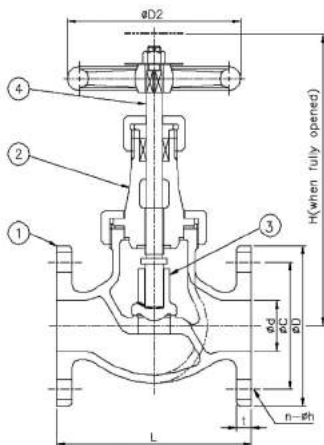
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	2.4 [24.0]
Seat	1.76 [17.6]

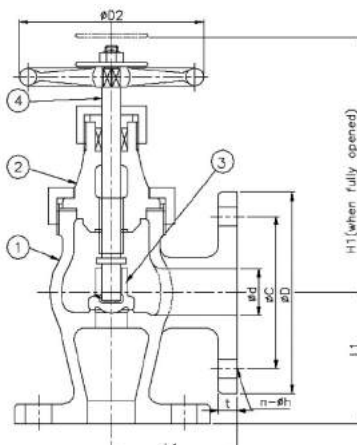
SIZE	d	L	L1	D	C	n-h	t	H	H1	D2	F7403(Kg)	F7404(Kg)
015	15	110	70	95	70	4-15	12	135	125	80	2.86	2.83
020	20	120	75	100	75	4-15	14	145	135	100	3.82	3.75
025	25	130	85	125	90	4-19	14	165	150	125	5.35	5.31
032	32	160	95	135	100	4-19	16	175	155	125	7.06	6.87
040	40	180	100	140	105	4-19	16	195	170	140	8.63	8.33

SERIES F 7411 - JIS 5K Bronze Globe Check Valve Union Bonnet / SERIES F 7412 - JIS 5K Bronze Angle Check Valve Union Bonnet

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K00



SERIES F 7411 Globe Valve



SERIES F 7412 Angle Valve

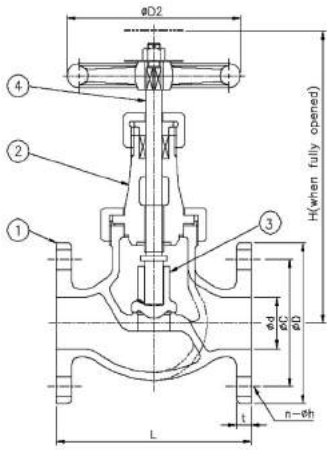
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

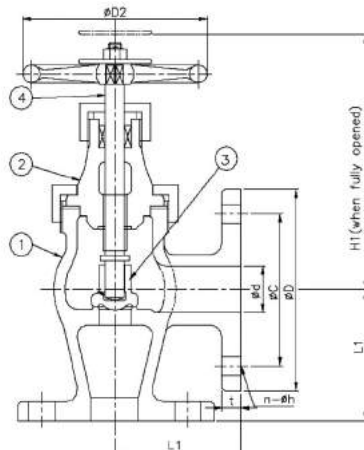
SIZE	d	L	L1	D	C	n-h	t	H	H1	D2	F7411(Kg)	F7412(Kg)
015	15	100	55	80	60	4-12	9	150	140	80	2.12	2.07
020	20	110	60	85	65	4-12	10	160	150	100	2.91	2.81
025	25	120	65	95	75	4-12	10	185	170	125	3.82	3.67
032	32	140	80	115	90	4-15	12	190	170	125	5.09	4.85
040	40	160	85	120	95	4-15	12	205	180	140	6.71	6.17

SERIES F 7413 - JIS 16K Bronze Globe Check Valve Union Bonnet / **SERIES F 7414 - JIS 16K** Bronze Angle Check Valve Union Bonnet

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 16K



SERIES F 7413 Globe Valve



SERIES F 7414 Angle Valve

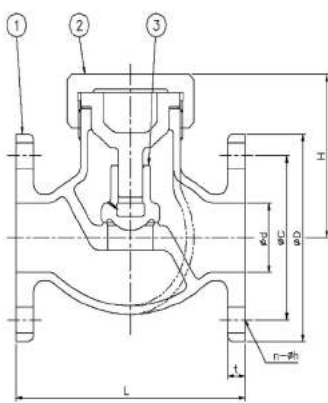
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

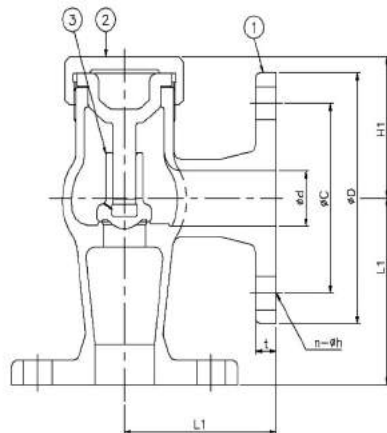
SIZE	d	L	L1	D	C	n-h	t	H	H1	D2	F7413(Kg)	F7414(Kg)
015	15	110	70	95	70	4-15	12	150	140	80	2.87	2.86
020	20	120	75	100	75	4-15	14	160	150	100	3.79	3.75
025	25	130	85	125	90	4-19	14	185	125	125	5.44	5.38
032	32	160	95	135	100	4-19	16	190	125	125	7.04	6.84
040	40	180	100	140	105	4-19	16	205	140	140	8.89	8.34

SERIES F 7415 - JIS 5K Bronze Lift Check Globe Valve Union Bonnet / **SERIES F 7416 - JIS 5K** Bronze Lift Check Angle Valve Union Bonnet

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K



SERIES F 7415 Lift Check Globe Valve



SERIES F 7416 Lift Check Angle Valve

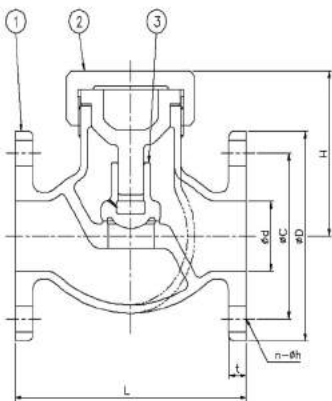
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	1.05 [10.5]
Seat	0.77 [7.7]

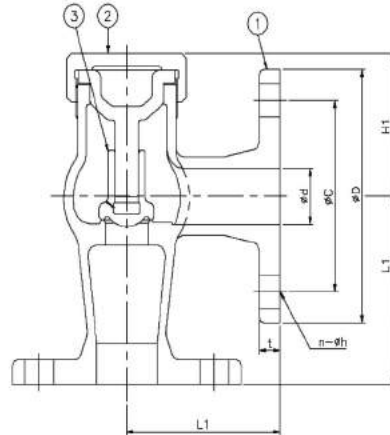
SIZE	d	L	L1	D	C	n-h	t	H	H1	F7415(Kg)	F7416(Kg)
015	15	100	55	80	60	4-12	9	66	56	1.62	1.57
020	20	110	60	85	65	4-12	10	71	59	2.17	2.07
025	25	120	65	95	75	4-12	10	81	67	2.80	2.65
032	32	140	80	115	90	4-15	12	83	65	3.92	3.68
040	40	160	85	120	95	4-15	12	91	69	5.49	4.95

SERIES F 7417 - JIS 16K Bronze Lift Check Globe Valve Union Bonnet / **SERIES F 7418 - JIS 16K** Bronze Lift Check Angle Valve Union Bonnet

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 16K



SERIES F 7417 Lift Globe Check Valve



SERIES F 7418 Lift Check Angle Valve

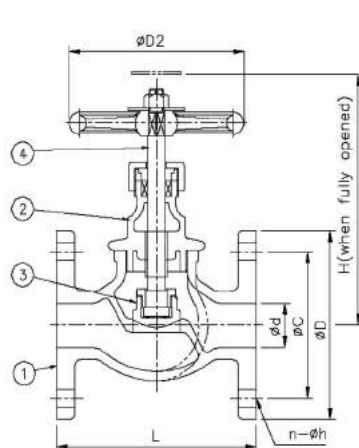
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	3.3 [33.0]
Seat	2.42 [24.2]

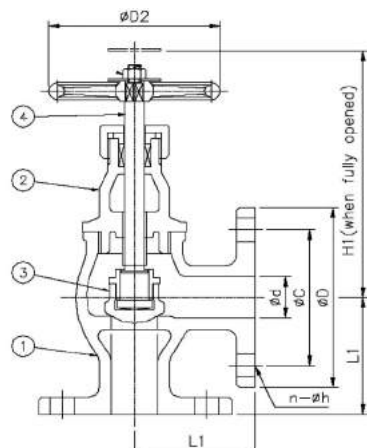
SIZE	d	L	L1	D	C	n-h	t	H	H1	F7417(Kg)	F7418(Kg)
015	15	110	70	95	70	4-15	12	66	56	2.37	2.36
020	20	120	75	100	75	4-15	14	71	59	3.05	3.01
025	25	130	85	125	90	4-19	14	81	67	4.42	4.36
032	32	160	95	135	100	4-19	16	83	65	5.87	5.67
040	40	180	100	140	105	4-19	16	91	69	7.67	7.12

SERIES B 2026 - JIS 10K Bronze Globe Valve / **SERIES B 2027 - JIS 10K** Bronze Angle Valve

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 10K



SERIES B 2026 Globe Valve



SERIES B 2027 Angle Valve

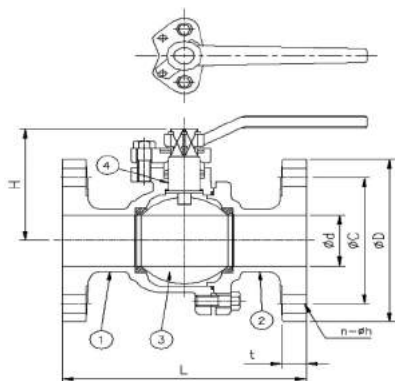
Part No.	Material
1 - Body	Bronze
2 - Bonnet	Bronze
3 - Disc	Bronze
4 - Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	1.96 [20.0]
Seat	1.47 [15.0]

SIZE	d	L	L1	C	D	n-h	t	H	H1	D2
015	15	85	62	70	95	4-15	12	110	105	80
020	20	95	65	75	100	4-15	14	125	130	80
025	25	110	80	90	125	4-19	14	140	145	100
032	32	130	85	100	135	4-19	16	170	175	125
040	40	150	90	105	140	4-19	16	180	190	125
050	50	180	100	120	155	4-19	16	205	225	140

STAINLESS STEEL , CAST STEEL , CAST BRONZE 2-Way Ball Valve JIS 5K , 10K

Manufactured in accordance to JIS B 2003 / Flanges as per JIS B 2210 - 5K, 10K / Manufactured In Face to Face to JIS B 2002 / Manufactured In Design To JIS B 2002



SERIES HSN SCS 10BA 01 2-Way Ball Valve

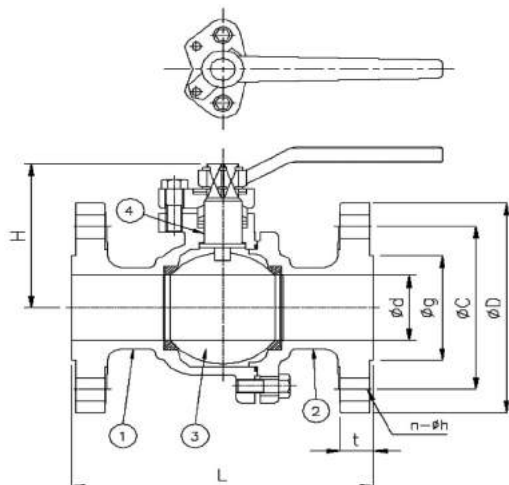
Part No.	Material
1 - Body	Stainless Steel / Cast Steel / Cast Bronze
2 - Body Cap	Stainless Steel / Cast Steel / Cast Bronze
3 - Ball	Stainless Steel

Test Pressure MPa[Kgf/cm ²]		
SIZE	Body	Seat
5K	1.05 [10.5]	0.77 [7.7]
10K	2.1 [21.0]	1.54 [15.4]

SIZE	d	5K FLANGE					10K FLANGE					H
		L	D	C	n-h	t	L	D	C	n-h	t	
015	15	100	80	60	4-12	9	110	95	70	4-15	12	70
020	20	110	85	65	4-12	10	120	100	75	4-15	14	75
025	25	120	95	75	4-12	10	130	125	90	4-19	14	100
032	32	140	115	90	4-15	12	160	135	100	4-19	16	110
040	40	160	120	95	4-15	12	180	140	105	4-19	16	110
050	50	178	130	105	4-15	14	178	155	120	4-19	16	125
065	65	190	155	130	4-15	14	190	175	140	4-19	18	155
080	80	203	180	145	4-19	14	203	185	150	8-19	18	165
100	100	229	200	165	8-19	16	229	210	175	8-19	18	185

STAINLESS STEEL , CAST STEEL , CAST BRONZE 2-Way Ball Valve JIS 20K , 30K

Manufactured in accordance to JIS B 2003 / Flanges as per JIS B 2210 - 20K, 30K / Manufactured In Face to Face to JIS B 2002 / Manufactured In Design To JIS B 2002



SERIES HSN SCS 10BA 02 2-Way Ball Valve

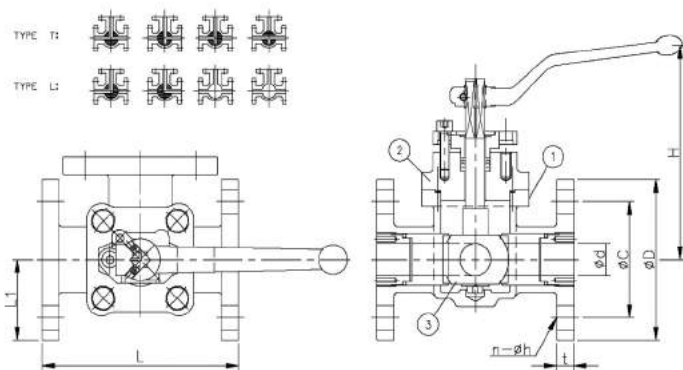
Part No.	Material
1 - Body	Stainless Steel / Cast Steel / Cast Bronze
2 - Body Cap	Stainless Steel / Cast Steel / Cast Bronze
3 - Ball	Stainless Steel

Test Pressure MPa[Kgf/cm ²]		
SIZE	Body	Seat
20K	5.01 [51.0]	3.74 [37.4]
30K	6.9 [69.0]	5 [50.0]

SIZE	d	20K FLANGE					30K FLANGE						H
		L	D	C	n-h	t	L	D	C	g	n-h	t	
015	15	104	95	70	4-15	14	112	115	80	55	4-19	18	70
020	20	114	100	75	4-15	16	118	120	85	60	4-19	18	75
025	25	124	125	90	4-19	16	132	130	95	70	4-19	20	100
032	32	144	135	100	4-19	18	152	140	105	80	4-19	22	110
040	40	164	140	105	4-19	18	172	160	120	90	4-23	22	110
050	50	214	155	120	8-19	18	180	165	130	105	8-19	22	125

STAINLESS STEEL , CAST STEEL , CAST BRONZE 3-Way Ball Valve JIS 5K , 10K

Manufactured in accordance to JIS B 2003 / Flanges as per JIS B 2210 - 5K, 10K / Manufactured In Face to Face to JIS B 2002 / Manufactured In Design To JIS B 2002



SERIES HSN SCS 10BA 03 3-Way Ball Valve

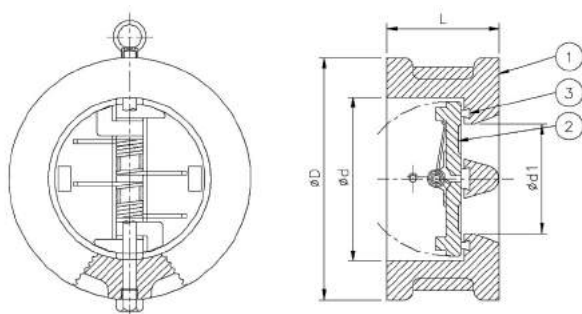
Part No.	Material
1 - Body	Stainless Steel / Cast Steel / Cast Bronze
2 - Body Cap	Stainless Steel / Cast Steel / Cast Bronze
3 - Ball	Stainless Steel

Test Pressure MPa[Kgf/cm ²]		
SIZE	Body	Seat
5K	1.05 [10.5]	0.77 [7.7]
10K	2.1 [21.0]	1.54 [15.4]

SIZE	d	5K FLANGE							10K FLANGE							H
		L	L1	D	C	n-h	t		L	L1	D	C	n-h	t		
015	15	110	55	80	60	4-12	9		130	65	95	70	4-15	12		195
020	20	120	60	85	65	4-12	10		150	75	100	75	4-15	14		196
025	25	130	65	95	75	4-12	10		160	80	125	90	4-19	14		194
032	32	160	80	115	90	4-15	12		190	95	135	100	4-19	16		215
040	40	170	85	120	95	4-15	12		220	110	140	105	4-19	16		236
050	50	190	95	130	105	4-15	14		240	120	155	120	4-19	16		245
065	65	220	110	155	130	4-15	14		300	150	175	140	4-19	18		289
080	80	320	160	180	145	4-19	14		320	160	185	150	8-19	18		304
100	100	370	185	200	165	8-19	16		370	185	210	175	8-19	18		326
125	125	440	220	235	200	8-19	16		440	220	250	210	8-23	20		351
150	150	470	235	265	230	8-19	16		470	235	280	240	8-23	22		379

STAINLESS STEEL , CAST STEEL , CAST IRON , CAST BRONZE Duo Check Valve - Wafer Type

Manufactured in accordance to JIS B 2003 / Flanges as per JIS B 2210 - 5K, 10K / Manufactured In Face to Face to JIS B 2002 / Manufactured In Design To JIS B 2002



SERIES HSN SCS 10BA 03 3-Way Ball Valve

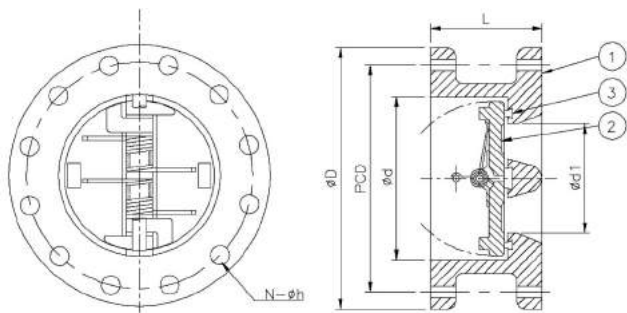
Part No.	Material
1 - Body	Stainless Steel / Cast Steel / Cast Bronze
2 - Disc	Stainless Steel / Cast Steel / Cast Bronze
3 - Seat	NBR

Test Pressure Kgf/cm ²		
SIZE	Body	Seat
10K, 150LBS	1.5[15]	1.1[11]
20K, 300LBS	2.1[21]	15.4[15.4]

SIZE	d	10K WAFER			20K WAFER			Inch	d	ANSI 150LBS			ANSI 300LBS		
		L	D	d1	L	D	d1			L	D	d1	L	D	d1
050	60	60	101	-	60	101	-	2"	60	60	105	-	60	111	-
065	75	67	121	51	67	121	51	2.5"	75	67	124	51	67	130	51
080	89	73	131	63	73	137	63	3"	89	73	137	63	73	149	63
100	114	73	156	82	73	162	82	4"	114	73	175	82	73	181	82
125	141	86	187	104	86	200	104	5"	141	86	197	104	86	216	104
150	168	98	217	131	98	235	131	6"	168	98	222	131	98	251	131
200	219	127	267	172	127	280	172	8"	219	127	279	172	127	308	172
250	273	146	330	220	146	353	220	10"	273	146	340	220	146	362	220
300	324	181	375	270	181	403	270	12"	324	181	410	270	181	422	270
350	350	184	420	284	222	447	284	14"	350	184	451	284	222	486	284
400	420	191	483	354	232	507	354	16"	420	191	514	354	232	540	354
450	453	203	538	370	264	572	370	18"	453	203	549	370	264	597	370
500	512	219	593	420	292	627	420	20"	512	219	606	420	292	654	420
600	579	222	697	469	318	731	469	24"	579	222	718	469	318	775	469

STAINLESS STEEL , CAST STEEL , CAST IRON , CAST BRONZE Duo Check Valve - Flange Type

Manufactured In Design To API 594, ASME B 16.34 / Manufactured In Face to Face to API 594, ASME B 16.10 / Flanges as per JIS B 2210 - 5K, 10K, 16K, 20K



SERIES HSN SCS 10BA 04 Duo Check Valve Flange Type

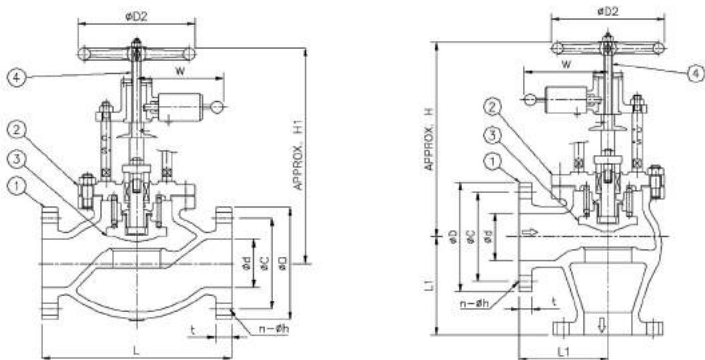
Part No.	Material
1 – Body	Stainless Steel / Cast Steel / Cast Bronze
2 – Disc	Stainless Steel / Cast Steel / Cast Bronze
3 – Seat	NBR

Test Pressure Kg/cm ²		
SIZE	Body	Seat
10K, 10K	1.5[15]	1.1[11]
20K	2.1[21]	15.4[15.4]

SIZE	d	5K FLANGE				10K FLANGE				20K FLANGE			
		D	C	PCD	n-h	D	L	PCD	n-h	D	L	PCD	n-h
050	60	130	60	105	4-15	155	60	120	4-19	155	60	120	8-19
065	75	155	67	130	4-15	175	67	140	4-19	175	67	140	8-19
080	89	180	73	145	4-19	185	73	150	8-19	200	73	160	8-23
100	114	200	73	165	8-19	210	73	175	8-19	225	73	185	8-23
125	141	235	86	200	8-19	250	86	210	8-23	270	86	225	8-25
150	166	265	98	230	8-19	280	98	240	8-23	305	98	260	12-25
200	207	320	127	280	8-23	330	127	290	12-23	350	127	305	12-25
250	260	385	146	345	12-23	400	146	355	12-23	430	146	380	12-27
300	300	430	181	390	12-23	445	181	400	16-25	480	181	430	16-27
350	339	480	184	435	12-25	490	184	445	12-25	540	222	480	16-33
400	387	540	191	495	16-25	560	191	510	16-27	605	232	540	16-33
450	438	605	203	555	16-25	620	203	565	20-27	675	264	605	20-33
500	487	655	219	605	20-25	675	219	620	20-27	730	292	660	20-33
550	533	720	222	665	20-27	745	222	680	20-27	795	305	720	20-39
600	579	770	222	715	20-27	795	222	730	24-33	845	318	770	24-39
650	629	825	356	770	24-27	845	356	780	24-33	945	356	850	24-48

HYDRAULIC EMERGENCY SHUT-OFF VALVES Hydraulic Operated Valves - F7399 Base

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 16K



SERIES – Hydraulic Operated "A"-Type

SERIES – Hydraulic Operated "L"-Type

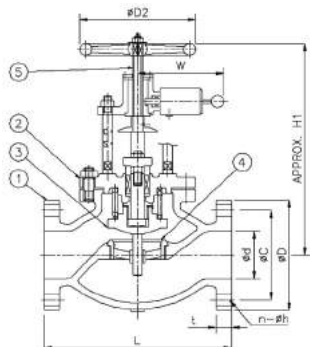
Part No.	Material
1 – Body	Bronze
2 – Bonnet	Bronze
3 – Disc	Bronze
4 – Stem	Brass

Test Pressure MPa[Kgf/cm ²]	
Body	0.7 [7.0]
Seat	0.2 [2.0]

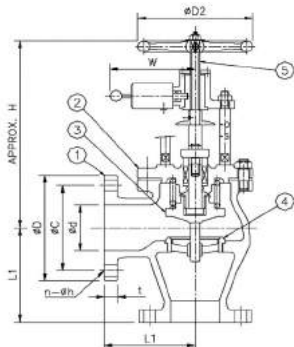
Size			d	D	C	n-h	t	H1	H	L	L1	W	D2
5K	015	15	80	60	4-12	9	200	190	110	70	125	100	
	020	20	85	65	4-12	10	200	190	120	75	125	100	
	025	25	95	75	4-12	10	200	190	130	85	125	100	
	032	32	115	90	4-15	12	230	215	160	95	130	100	
	040	40	120	95	4-15	12	235	215	170	100	130	100	
16K	015	15	95	70	4-15	12	200	190	110	70	125	100	
	020	20	100	75	4-15	14	200	190	120	75	125	100	
	025	25	125	90	4-19	14	200	190	130	85	125	100	
	032	32	135	100	4-19	16	230	215	160	95	130	100	
	040	40	145	105	4-19	16	235	215	170	100	130	100	

HYDRAULIC EMERGENCY SHUT-OFF VALVES *Hydraulic Operated Valves - F7399 Base*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2240 - 5K, 10K



SERIES - Hydraulic Operated "A"-Type



SERIES - Hydraulic Operated "L"-Type

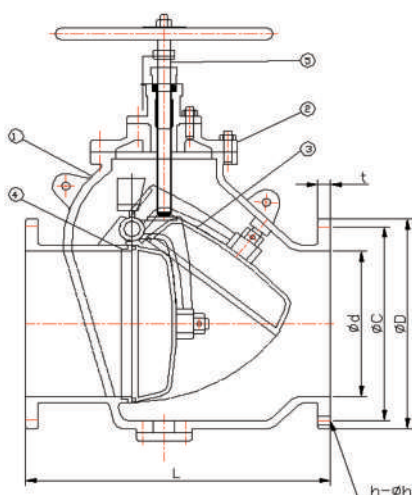
Part No.	Material
1 - Body	Cast Steel
2 - Bonnet	Cast Steel
3 - Disc	Stainless Steel
4 - Seat	Stainless Steel
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm2]		
Body	0.7 [7.0]	
Seat	0.2 [2.0]	

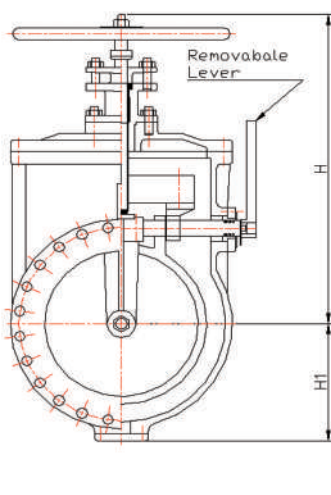
	Size	d	D	C	n-h	t	H1	H	L	L1	W	D2
5K	050	50	130	105	4-15	16	265	240	220	120	135	125
	065	65	155	130	4-15	18	305	275	270	130	135	125
	080	80	180	145	4-19	18	385	285	300	140	135	140
	100	100	200	165	8-19	18	370	320	350	160	150	160
	125	125	235	200	8-19	20	400	340	420	180	150	160
	150	150	265	230	8-19	22	450	380	490	205	150	180
	200	200	320	280	8-23	22	570	470	570	230	170	180
10K	050	50	155	120	4-19	16	265	240	220	120	135	125
	065	65	175	140	4-19	18	305	275	270	130	135	125
	080	80	185	150	8-19	18	385	285	300	140	135	140
	100	100	210	175	8-19	18	370	320	350	160	150	160
	125	125	250	210	8-23	20	400	340	420	180	150	160
	150	150	280	240	8-23	22	450	380	490	205	150	180
	200	200	330	290	12-23	22	570	470	570	230	170	180

INERT GAS LINE NON RETURN VALVE -16K *I.G VALVE*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 16K



SERIES HSN SCIG 01 Inert Gas Line Valve



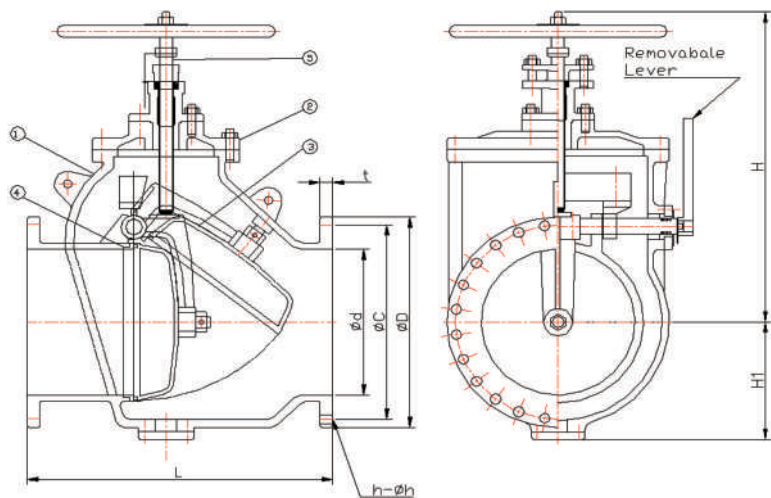
Part No.	Material
1 - Body	Stainless Steel / Cast Steel / Ductile Iron / Cast Iron
2 - Bonnet	Stainless Steel / Cast Steel / Ductile Iron / Cast Iron
3 - Disc	Stainless Steel +O-Ring
4 - Seat	Stainless Steel
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm2]		
Material	Body	Seat
Stainless	2.40	0.5
Cast Steel	2.40	0.5
Ductile Iron	0.75	0.5
Cast Iron	0.75	0.5

SIZE	d	L	D	C	n-h	t	H1	H
300	300	680	480	430	16-27	30	286	762
350	335	730	540	480	16-33	34	304	802
400	380	820	605	540	16-33	38	340	820
450	430	920	675	606	20-33	40	386	1018
500	480	990	730	660	20-33	42	410	1064
550	530	1024	795	720	20-39	44	436	1119.5
600	580	1128	845	770	24-39	46	462	1218

INERT GAS LINE NON RETURN VALVE -10K I.G VALVE

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES HSN SCIG 02 Inert Gas Line Valve

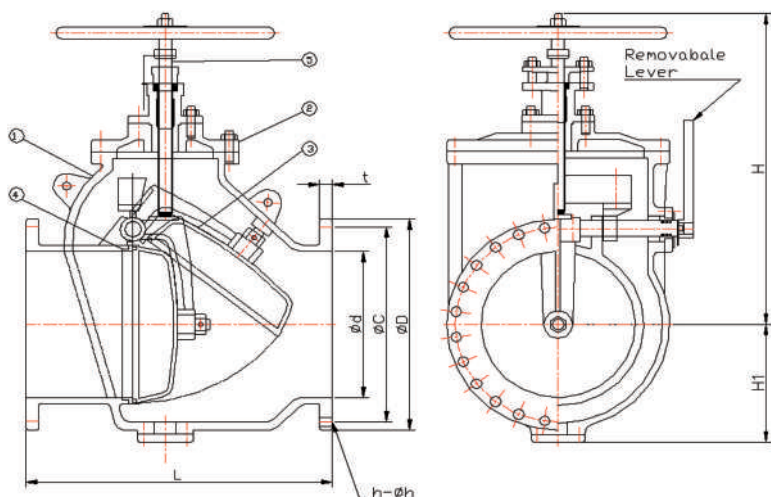
Part No.	Material
1 - Body	Stainless Steel / Cast Steel / Ductile Iron / Cast Iron
2 - Bonnet	Stainless Steel / Cast Steel / Ductile Iron / Cast Iron
3 - Disc	Stainless Steel +O-Ring
4 - Seat	Stainless Steel
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm2]		
Material	Body	Seat
Stainless	2.40	0.5
Cast Steel	2.40	0.5
Ductile Iron	0.75	0.5
Cast Iron	0.75	0.5

SIZE	d	L	D	C	n-h	t	H1	H
300	300	680	445	400	16-25	30	286	762
350	335	730	490	445	16-25	34	304	802
400	380	820	560	510	16-27	38	340	820
450	430	920	620	565	20-27	40	386	1018
500	480	990	675	620	20-27	42	410	1064
550	530	1024	745	680	20-33	44	436	1119.5
600	580	1128	795	730	24-33	46	462	1218

INERT GAS LINE NON RETURN VALVE - 5K I.G VALVE

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES HSN SCIG 03 Inert Gas Line Valve

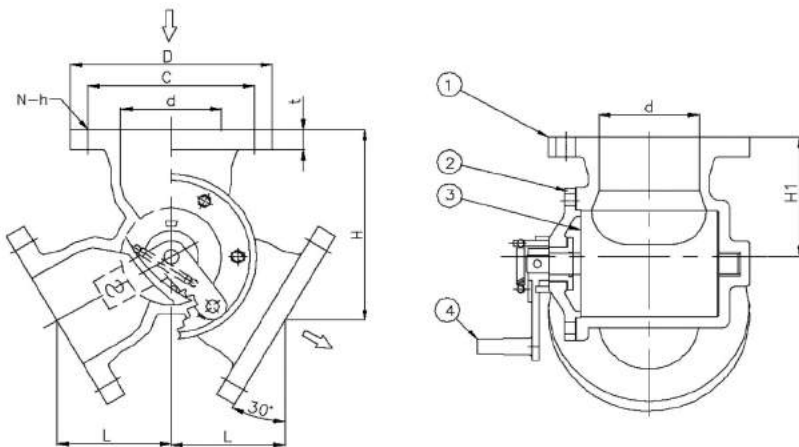
Part No.	Material
1 - Body	Stainless Steel / Cast Steel / Ductile Iron / Cast Iron
2 - Bonnet	Stainless Steel / Cast Steel / Ductile Iron / Cast Iron
3 - Disc	Stainless Steel +O-Ring
4 - Seat	Stainless Steel
5 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm2]		
Material	Body	Seat
Stainless	1.10	0.5
Cast Steel	1.10	0.5
Ductile Iron	0.75	0.5
Cast Iron	0.75	0.5

SIZE	d	L	D	C	n-h	t	H1	H
300	300	680	430	390	12-23	30	286	762
350	335	730	480	435	12-25	34	304	802
400	380	820	540	495	16-25	38	340	820
450	430	920	605	555	16-25	40	386	1018
500	480	990	655	605	20-25	42	410	1064
550	530	1024	720	665	20-27	44	436	1119.5
600	580	1128	770	715	20-27	46	462	1218

CAST IRON SOIL LINE BRANCH VALVE *Soil Branch 3-Way Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES HSN FCSB Soil Branch 3-Way Valve

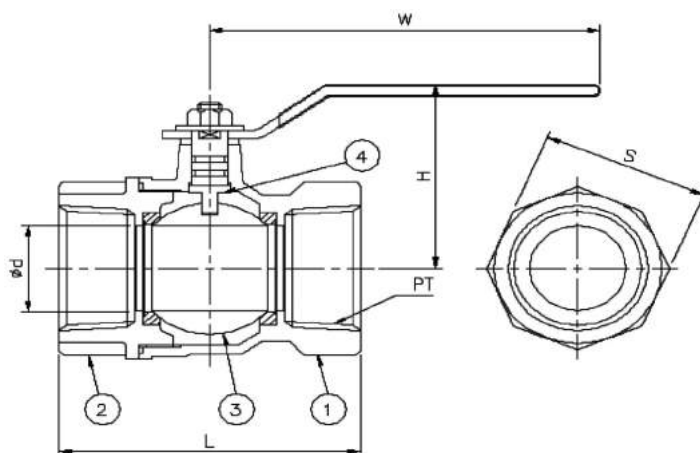
Part No.	Material
1 - Body	Cast Iron
2 - Bonnet	Cast Iron
3 - Cylinder	Bronze
4 - Lever	Bronze

Test Pressure MPa[Kgf/cm ²]	
Body	0,20 [2,0]
Seat	—

SIZE	d	L	D	C	n-h	t	H	H1
100	100	113	200	165	8-19	20	195	130
125	125	126	235	200	8-19	20	218	145
150	150	143	265	230	8-19	22	248	165

BRASS BALL VALVE (SCREW END) *Screw Ball Valve*

Manufactured in accordance to JIS F 7400



SERIES HSN SHBC 5BAS L02 Screw Ball Valve

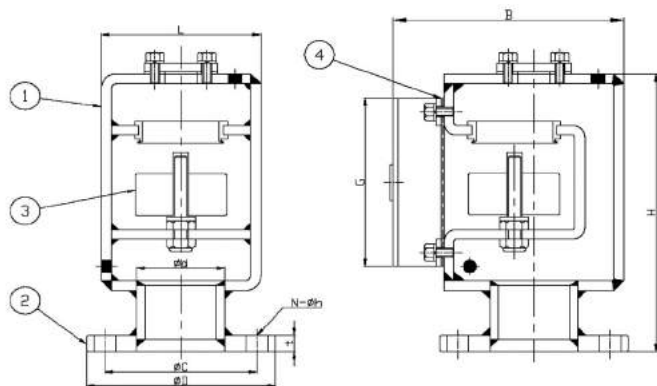
Part No.	Material
1 - Body	BRASS
2 - Bonnet	BRASS
3 - Ball	BRASS
4 - Stem	BRASS

Test Pressure MPa[Kgf/cm ²]	
Body	1,05 [10,5]
Seat	0,77 [7,7]

SIZE	d	L	H	W	S	PT
008	8	41	29,5	62	18	1/4"
010	8	43	29,5	62	20	3/8"
015	10	53	35,9	88	26	1/2"
020	15	60	45,5	95	31	3/4"
025	20	73	54,5	121	38	1"
032	25	84	59	121	47	1-1/4"
040	32	94	65,5	135	54	1-1/2"
050	40	107	73,5	144	67	2"

Air Vent Head (40A ~ 80A) *Box Type Air Vent Head Disc Float*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K,10K



SERIES HSN AVHFC 510AV D01 Air Vent Head

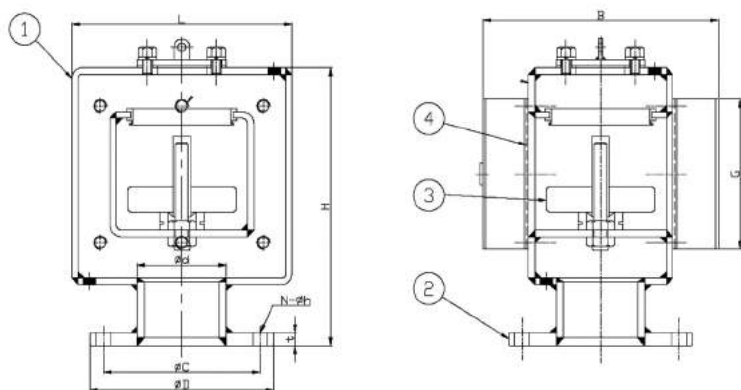
Part No.	Material
1 - Body	Mild Steel , Ductil Iron , Cast Iron
2 - Flange	Mild Steel , Ductil Iron , Cast Iron
3 - Disc Float	Stainless Steel
4 - Flame Screen	Stainless Steel

Test Pressure MPa[Kgf/cm2]	
Body	0.1 [1.0]
Seat	0.1 [1.0]

Size	d	C	D	n-h	t	H	L	G	B
5K	040	49.1	95	120	4-15	12	234	105	123
	050	61.1	105	130	4-15	14	234	105	123
	065	77.1	130	155	4-15	14	238	120	123
	080	90.0	145	180	4-19	14	250	135	133
10K	040	49.1	105	140	4-19	16	234	105	123
	050	61.1	120	155	4-19	20	234	105	123
	065	77.1	140	175	4-19	22	238	120	123
	080	90.0	150	185	8-19	22	250	135	133

Air Vent Head (100A ~ 600A) *Box Type Air Vent Head Disc Float*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K



SERIES HSN AVHFC 5AV D01 Air Vent Head

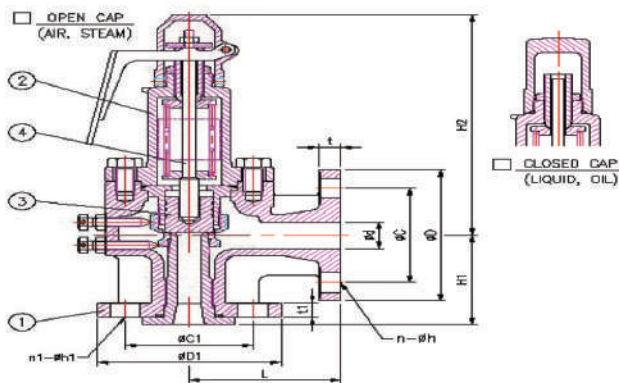
Part No.	Material
1 - Body	Mild Steel , Ductil Iron , Cast Iron
2 - Flange	Mild Steel , Ductil Iron , Cast Iron
3 - Disc Float	Stainless Steel
4 - Flame Screen	Stainless Steel

Test Pressure MPa[Kgf/cm2]	
Body	0.1 [1.0]
Seat	0.1 [1.0]

Size	d	C	D	n-h	t	H	L	G	B
5K	100	115.4	165	200	8-19	16	270	232	151
	125	141.2	200	235	8-19	16	306	276	164
	150	166.6	230	265	8-19	18	323	318	183
	200	218.0	280	320	8-23	20	392	425	228
	250	269.5	345	385	12-23	22	440	520	249
	300	321.0	390	430	12-23	22	557	588	272
	350	358.1	435	480	12-25	24	584	678	298
	400	409.0	495	540	16-25	24	644	758	329
	450	460.0	555	605	16-25	24	695	840	374
	500	511.0	605	655	20-25	24	780	917	409
	500	562.0	665	720	20-27	26	910	1001	489
	600	613.0	715	770	20-27	26	1010	1091	539

STAINLESS STEEL , CAST STEEL , DUCTILE IRON , CAST BRONZE *Safety Relief Valve*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES HSN SRSC Y01 Safety Valve

Part No.	Material
1 - Body	Stainless Steel , Cast Steel
2 - Bonnet	Ductile Iron , Cast Bronze
3 - Disc	Stainless Steel
4 - Stem	Stainless Steel

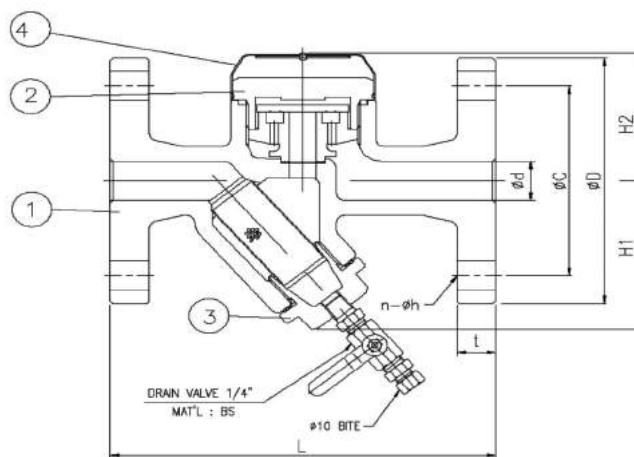
*** NOTE**

1. Max. Working Pressure : 11Kgf/Cm²
2. Max. Working Temperature : 220°C
3. Setting Pressure Range : 0.35~11Kgf/Cm²
4. Hydro. Test Pressure : Working Pressure x 1.5

SIZE IN x OUT	L	H1	H2	INLET FLANGE 10K				OUTLET FLANGE 10K FF				
				D1	C1	t1	n1-h1	D	C	d	t	n-h
15Ax25A	95	85	220	95	70	14	4-15	125	90	25	14	4-19
20Ax25A	95	85	220	100	75	16	4-15	125	90	25	14	4-19
25Ax40A	100	105	240	125	90	16	4-19	140	105	40	16	4-19
25Ax50A	100	105	240	125	90	16	4-19	155	120	50	16	4-19
32Ax50A	125	125	320	135	100	18	4-19	155	120	50	16	4-19
32Ax65A	125	125	320	135	100	18	4-19	175	140	65	18	4-19
40Ax65A	130	125	320	140	105	18	4-19	175	140	65	18	4-19
50Ax80A	145	135	360	155	120	18	4-19	185	150	80	18	8-19

THERMODYNAMIC TYPE STEAM TRAP *Steam Trap*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K, 16K



SERIES HSN ST Y01 Steam Trap

Part No.	Material
1 - Body	Ductile Iron
2 - Cap	Stainless Steel
3 - Plug	Cast Steel
4 - Insulation Cap	Stainless Steel

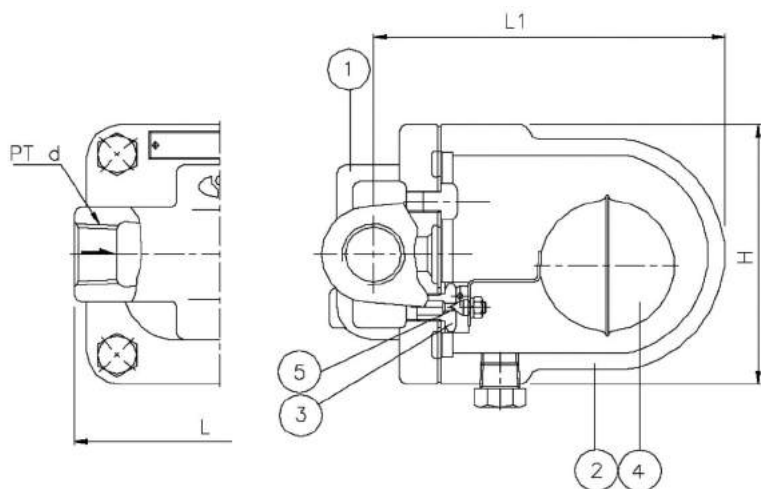
*** NOTE**

1. Max. Working Pressure : 16Kgf/Cm²
2. Max. Working Temperature : 220°C
3. Applicable Fluid : Steam
4. Hydro. Test Pressure : Working Pressure x 1.5

SIZE		L	H1	H2	d	D	C	t	n-h	Weight(Kg)
5K	15	130	60	52	15	80	60	9	4-12	2.0
	20	132	60	52	20	85	65	10	4-12	2.3
	25	142	60	52	25	95	75	14	4-12	2.5
16K	15	136	60	52	15	95	70	12	4-15	3.0
	20	140	60	52	20	100	75	14	4-15	2.5
	25	150	60	52	25	125	90	14	4-19	3.2

BALL FLOAT TYPE AIR TRAP *Air Trap - PT Screw*

Manufactured in accordance to JIS F 7400 / Connection - PT Screwed



Part No.	Material
1 - Body	Ductile Iron
2 - Bonnet	Ductile Iron
3 - Seat	Stainless Steel
4 - Ball Float	Stainless Steel
5 - Disc	Stainless Steel

*** NOTE**

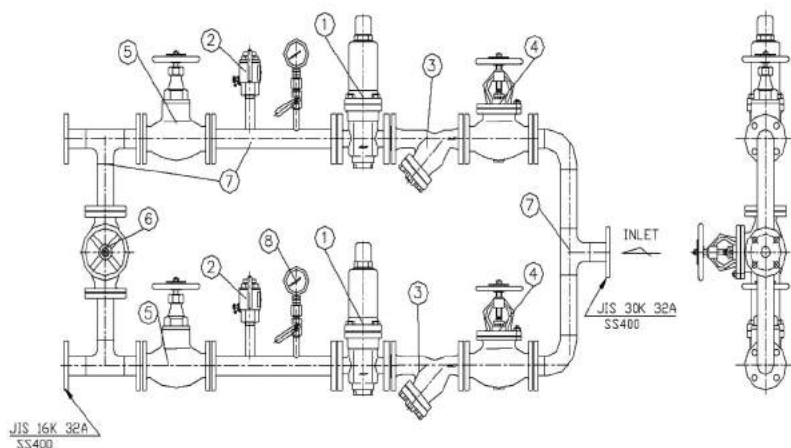
1. Max. Working Pressure : 14Kgf/Cm²
2. Max. Working Temperature : 220°C
3. Applicable Fluid : Air
4. Hydro. Test Pressure : Working Pressure x 1,5
5. Connection : Pt Screwed

SERIES HSN AT Y01 Air Trap

SIZE	L	L1	H	d (PT)
15	120	120	155	1/2"
20	120	120	155	3/4"
25	120	120	190	1"
32	270	240	295	1-1/4"
40	270	240	295	1-1/2"
50	300	260	310	2"

BY-PASS VALVE UNIT *JIS 30K 32A For Air Pressure Reducing Valve UNIT*

Manufactured in accordance to JIS F 7400



SERIES HSN BY Y01 Pressure Reducing Valve UNIT

SPECIFICATIONS

1. NOMINAL PRESSURE : 30K
2. DESIGN TEMPERATURE : 100°C
3. APPLICATION FLUID : AIR
4. PRESSURE : P1: 30.0K , P2: 7.0K

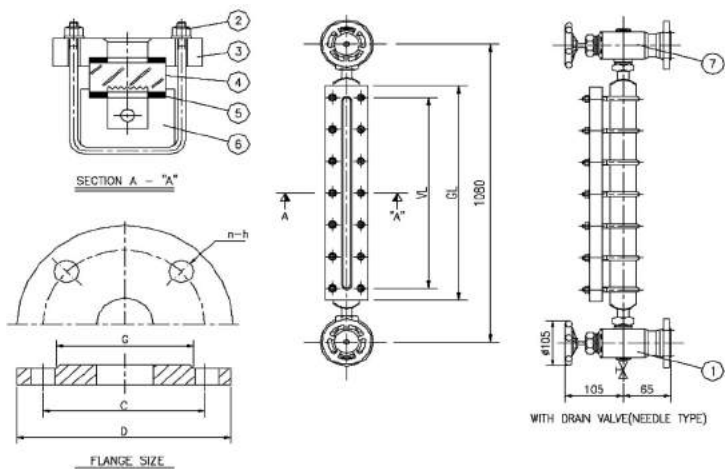
SPECIFICATIONS

1. NOMINAL PRESSURE : 30K
2. DESIGN TEMPERATURE : 100°C
3. APPLICATION FLUID : AIR
4. PRESSURE : P1: 30.0K , P2: 7.0K

DESCRIPTION	Q'ty	Material	REMARK
1 - REDUCING VALVE JIS30K-32A	2	Cast Steel	30 → 7.0K
2 - SAFETY VALVE PT1"xPT1"	2	Cast Bronze	Set : 7.7K
3 - STRAINER JIS 30K 32A	2	Cast Steel	
4 - GLOBE VALVE JIS30K-32A	2	Cast Steel	
5 - GLOBE CHECK VALVE JIS16K-32A	2	Cast Bronze	
6 - GLOBE VALVE JIS16K-32A	1	Cast Bronze	
7 - PIPE PICE	5	STPG370	Sch40
8 - PRESSURE GUAGE & BALL VALVE	2Sets	-	Ø60,0 (15K)

REFLEX TYPE LEVEL GAUGE - SCREW DOWN TYPE *Reflex Type Level Gauge*

Manufactured in accordance to JIS F 7400



SERIES HSN SLG-RH-S0320 Level Gauge

Part No.	Material	Q'ty
1 - Screw Down V/V	Stainless Steel	2
2 - U-Bolt	-	-
3 - Gauge Cover	-	1
4 - Glass/Borosilicate	1	
5 - Packin	Non-Asbestos	2
6 - Gauge Body	Stainless Steel, Steel	1
7 - Gauge Valve	Stainless Steel	

*** NOTE**

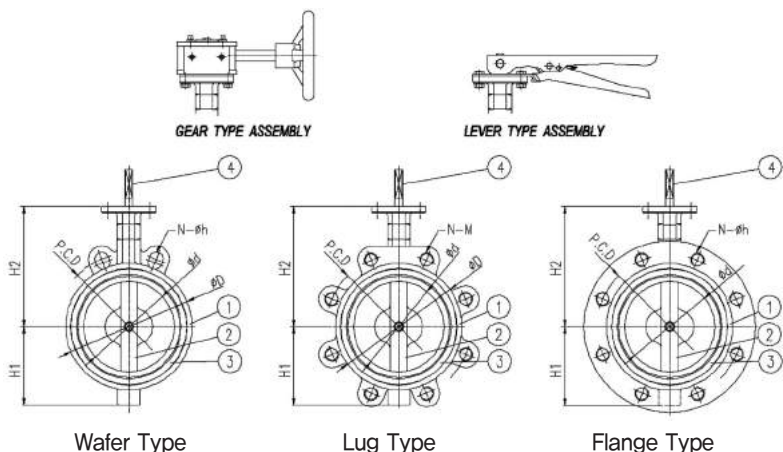
1. Max. Working Pressure : 23Kgf/Cm2
2. Max. Working Temperature : 200℃
3. Applicable Fluid : Boiler Water Tank5

SIZE	D	C	G	n-h	Remark
5K 25A	95	75	-	4-15	
10K 20A	100	75	-	4-15	
16K 20A	100	75	58	4-15	
150Lbs x 25A	108	79.5	51	4-16	
300Lbs x 25A	124	89	51	4-20	
PN10 x 25A	115	85	-	4-14	

Part No.	Material	Q'ty
1 - Screw Down V/V	Stainless Steel	2
2 - U-Bolt	-	-
3 - Gauge Cover	-	1
4 - Glass	Borosilicate	1
5 - Packing	Non-Asbestos	2
6 - Gauge Body	Stainless Steel, Steel	1
7 - Gauge Valve	Stainless Steel	

SIRES F 7480 BUTTERFLY VALVE *Butterfly Valve (Wafer, Lug, Flange Type)*

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 5K, 10K, 16K



Part No.	Material
1 - Body	Stainless Steel, Cast Steel Ductile Iron, Cast Bronze
2 - Disc	Stainless Steel
3 - Seat	Viton
4 - Stem	Stainless Steel

Test Pressure MPa[Kgf/cm2]

*** NOTE**

Hydro. Test Pressure : Working Pressure x 1.5

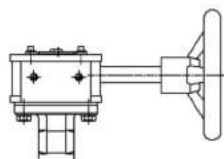
SIZE	d	D	L	H1	H2	Flange 5K		Flange 10K		Flange 16K(20K)	
						PCD	N-h (M)	PCD	N-h (M)	PCD	N-h (M)
40	40	86	40	54	122	95	4-15(M12)	105	4-19(M16)	105	4-19(M16)
50	52	105	43	57	129	105	4-15(M12)	120	4-19(M16)	120	8-19(M16)
65	65	114	46	67	139	130	4-15(M12)	140	4-19(M16)	140	8-19(M16)
80	80	129	46	78	156	145	4-19(M16)	150	8-19(M16)	160	8-23(M20)
100	100	155	52	100	164	165	8-19(M16)	175	8-19(M16)	185	8-23(M20)
125	125	180	56	107	187	200	8-19(M16)	210	8-23(M20)	225	8-25(M22)
150	150	207	56	122	200	230	8-19(M16)	240	8-23(M20)	260	12-25(M22)
200	198	260	60	160	238	280	8-23(M20)	290	12-23(M20)	305	12-25(M22)
250	248	331	68	215	383	345	12-23(M20)	355	12-25(M22)	380	12-27(M24)
300	298	377	78	245	316	390	12-23(M20)	400	16-25(M22)	430	16-27(M24)

SIRES F 7480 BUTTERFLY VALVE

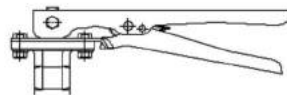
F 7480 Butterfly Valve (Wafer, Lug, Flange Type)

Manufactured in accordance to JIS F 7400

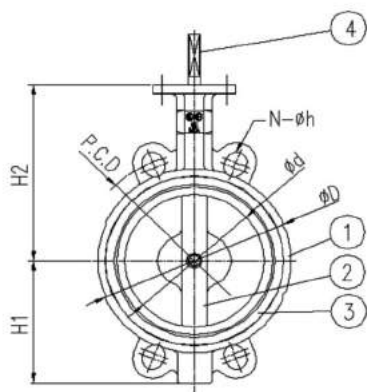
/ Flanges as per JIS B 2210 – 5K, 10K, 16K



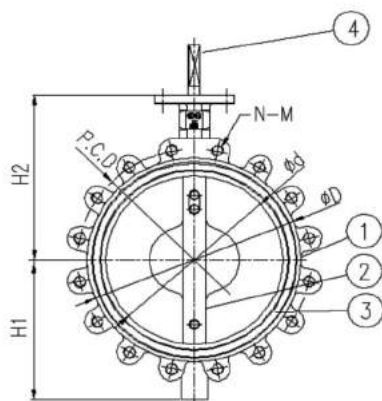
GEAR TYPE ASSEMBLY



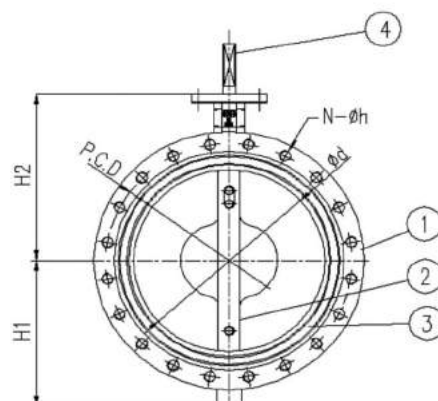
LEVER TYPE ASSEMBLY



Wafer Type



Lug Type



Flange Type

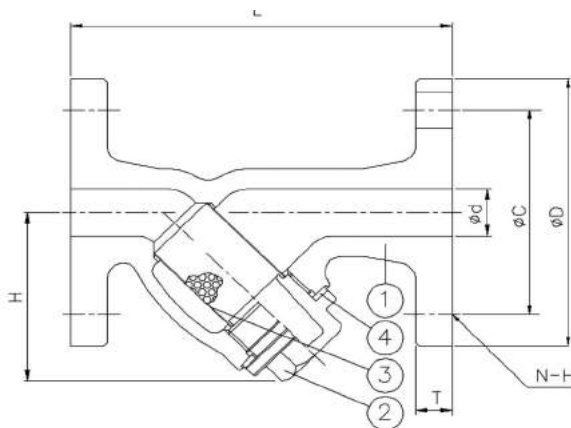
Part No.	Material
1 – Body	Stainless Steel, Cast Steel Ductile Iron, Cast Bronze
2 – Disc	Stainless Steel
3 – Seat	Viton
4 – Stem	Stainless Steel

Test Pressure MPa[Kgf/cm2]
* NOTE Hydro. Test Pressure : Working Pressure x 1.5

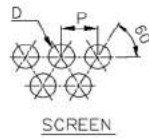
SIZE	d	D	L	H1	H2	Flange 5K		Flange 10K		Flange 16K(20K)	
						PCD	N-h (M)	PCD	N-h (M)	PCD	N-h (M)
350	327	416	78	285	341	435	12-25(M22)	445	16-33(M22)	480	16-33(M30)
400	387	475	102	304	382	495	16-25(M22)	510	16-33(M24)	540	16-33(M30)
450	438	535	114	330	403	555	16-25(M22)	565	20-33(M24)	605	20-33(M30)
500	477	590	127	370	442	605	20-25(M22)	620	20-33(M24)	660	20-33(M30)
550	518	680	140	410	475	665	20-27(M24)	680	20-33(M30)	720	20-39(M36)
600	560	695	154	420	510	715	20-27(M24)	730	24-33(M30)	770	24-39(M36)
650	585	735	165	455	530	770	24-27(M24)	780	24-33(M30)	820	24-39(M36)
700	690	800	165	480	580	820	24-27(M24)	840	24-33(M30)	875	24-42(M39)
750	729	857	180	535	585	880	24-33(M30)	900	24-33(M30)	935	24-42(M39)
800	785	920	180	570	630	930	24-33(M30)	950	28-33(M30)	990	24-48(M45)
850	820	945	200	590	660	980	24-33(M30)	1000	28-33(M30)	1040	24-48(M45)
900	870	1000	203	640	700	1030	24-33(M30)	1050	28-33(M30)	1090	28-48(M45)
1000	960	1095	216	700	750	1130	28-33(M30)	1160	28-39(M36)	1210	28-56(M52)

CAST STEEL , DUCTILE IRON , CAST BRONZE Y - Type Strainer (15A ~ 40A)

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES HSN YSR Y01 Y Strainer



Part No.	Material
1 - Body	Cast Steel / Cast Bronze Ductile Iron
2 - Cap	Cast Bronze
3 - Screen	Stainless Steel
4 - Gasket	Non - Asbestos

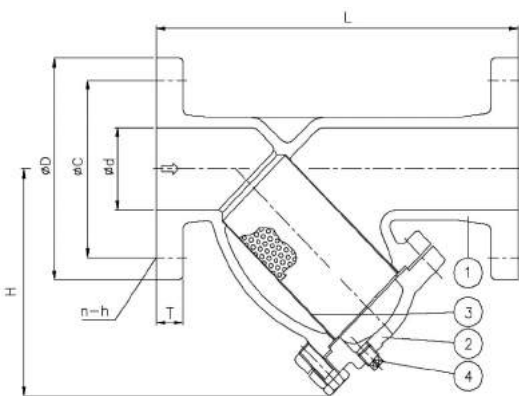
* NOTE

1. Nominal Pressure : 6 Kgf/Cm²
2. Design Temperature : 220°C
3. Applicable Std.: KS B 1538
4. Applicable Fluid : Steam & Liquid (Water & Oil)
5. Hydrostatic Pressure : 9 Kgf/Cm²
(Holding Time : Min. 5 Minute)

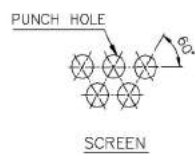
SIZE	d	C	D	n-h	t	L	H	REMARK											
15	15	70	95	4-15	12	125	60	<table><tr><th colspan="3">SCREEN DIMENSION</th></tr><tr><td>t</td><td>D</td><td>P</td></tr><tr><td>0,5</td><td>Ø 3,0</td><td>4,0</td></tr></table>			SCREEN DIMENSION			t	D	P	0,5	Ø 3,0	4,0
SCREEN DIMENSION																			
t	D	P																	
0,5	Ø 3,0	4,0																	
20	20	75	100	4-15	14	130	75												
25	25	90	125	4-19	14	165	85												
32	32	100	135	4-19	16	178	95												
40	40	105	140	4-19	16	195	105												
32	32	100	135	4-19	16	160	95												
50	50	120	155	4-19	16	200	160												

CAST STEEL , DUCTILE IRON , CAST BRONZE Y - Type Strainer (50A ~ 350A)

Manufactured in accordance to JIS F 7400 / Flanges as per JIS B 2210 - 10K



SERIES HSN YSR Y02 Y Strainer



Part No.	Material
1 - Body	Cast Steel / Cast Bronze Ductile Iron
2 - Cap	Cast Bronze
3 - Screen	Stainless Steel
4 - Plug	SS400

* NOTE

1. Nominal Pressure : 10 Kgf/Cm²
2. Design Temperature : 220°C
3. Applicable Std.: KS B 1538
4. Applicable Fluid : Steam & Liquid (Water & Oil)
5. Hydrostatic Pressure : 15 Kgf/Cm²
(Holding Time : Min. 5 Minute)

SIZE	d	C	D	n-h	t	L	H	REMARK																				
50	50	120	155	4-19	16	240	160	<table><tr><th colspan="3">SCREEN DIMENSION</th></tr><tr><th>SIZE</th><th>t</th><th>Punch Hole</th></tr><tr><td>50A</td><td>0.5</td><td>Ø 3</td></tr><tr><td>65A~100A</td><td>0.7</td><td>Ø 5</td></tr><tr><td>125A~200A</td><td>1.0</td><td>Ø 8</td></tr><tr><td>250A~350A</td><td>1.5</td><td>Ø 10</td></tr></table>			SCREEN DIMENSION			SIZE	t	Punch Hole	50A	0.5	Ø 3	65A~100A	0.7	Ø 5	125A~200A	1.0	Ø 8	250A~350A	1.5	Ø 10
SCREEN DIMENSION																												
SIZE	t	Punch Hole																										
50A	0.5	Ø 3																										
65A~100A	0.7	Ø 5																										
125A~200A	1.0	Ø 8																										
250A~350A	1.5	Ø 10																										
65	65	140	175	4-19	18	255	155																					
80	80	150	185	8-19	18	290	190																					
100	100	175	210	8-19	18	330	215																					
125	125	210	250	8-23	20	400	290																					
150	150	240	280	8-23	22	470	300																					
200	200	290	330	12-23	22	570	400																					
250	250	355	400	12-25	24	640	440																					
300	300	400	445	16-25	24	785	545																					
350	350	445	490	16-25	26	880	600																					

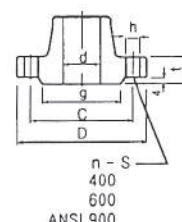
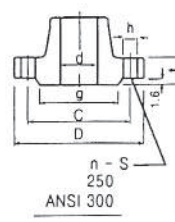
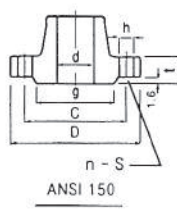
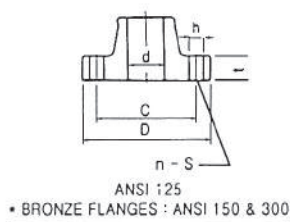
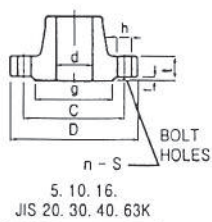
참고자료 / 관플랜지 기준치수 (JIS) Reference Date / Flange Table (JIS)

Disappearance dimension in JIS 20K table should be followed JIS 16K

JIS B2214-1976

d	JIS 5kgf/cm ² JIS B2211-1977									JIS 10kgf/cm ² JIS B2212-1977									JIS 16kgf/cm ² JIS B2213-1976									JIS20k
	D	t		$\bar{f}$	g	c	n	h	δ	D	t		$\bar{f}$	g	c	n	h	δ	D	t		$\bar{f}$	g	c	n	h	δ	t
		FC	other								FC	other								FC	other	other						
15	80	12	9	1	48	60	4	12	M10	95	16	12	1	52	70	4	15	M12	95	-	12	1	52	70	4	15	M12	14
20	85	14	10	1	52	65	4	12	M10	100	18	14	1	58	75	4	15	M12	100	-	14	1	58	75	4	15	M12	16
25	95	14	10	1	62	75	4	12	M10	125	18	14	1	70	90	4	19	M16	125	-	14	1	70	90	4	19	M16	16
32	115	16	12	2	72	90	4	15	M12	135	20	16	2	80	100	4	19	M16	135	-	16	2	80	100	4	19	M16	18
40	120	16	12	2	78	95	4	15	M12	140	20	16	2	85	105	4	19	M16	140	-	16	2	85	105	4	19	M16	18
50	130	16	14	2	88	105	4	15	M12	155	20	16	2	100	120	4	19	M16	155	20	16	2	100	120	8	19	M16	18
65	155	18	14	2	112	130	4	15	M12	175	22	18	2	120	140	4	19	M16	175	22	18	2	120	140	8	19	M16	20
80	180	18	14	2	125	145	4	19	M16	185	22	18	2	130	150	8	19	M16	200	24	20	2	135	160	8	23	M20	22
100	200	20	16	2	145	165	8	19	M16	210	24	18	2	155	175	8	19	M16	225	26	22	2	160	185	8	23	M20	24
125	235	20	16	2	180	200	8	19	M16	250	24	20	2	185	210	8	23	M20	270	26	22	2	195	225	8	25	M22	26
150	265	22	18	2	210	230	8	19	M16	280	26	22	2	215	240	8	23	M20	305	28	24	2	230	260	12	25	M22	28
200	320	24	20	2	255	280	8	23	M20	330	26	22	2	265	290	12	23	M20	350	30	26	2	275	305	12	25	M22	30
250	385	26	22	2	320	345	12	23	M20	400	30	24	2	325	355	12	25	M22	430	34	28	2	345	380	12	27	M24	34
300	430	28	22	3	365	390	12	23	M20	445	32	24	3	370	400	16	25	M22	480	36	30	3	395	430	16	27	M24	36

d	JIS 30kgf/cm ² JIS B2215—1976								JIS 40kgf/cm ² JIS B2216—1976								JIS 63kgf/cm ² JIS B2217—1976									
	D	t	$\bar{f}$	g	c	n	h	δ	d	D	t	$\bar{f}$	g	c	n	h	δ	d	D	t	$\bar{f}$	g	c	n	h	δ
15	115	18	1	55	80	4	19	M16	15	115	20	1	55	80	4	19	M16	12	120	23	1	55	85	4	19	M16
20	120	18	1	60	85	4	19	M16	20	120	20	1	60	85	4	19	M16	17	135	25	1	60	95	4	23	M20
25	130	20	1	70	95	4	19	M16	25	130	22	1	70	95	4	19	M16	22	140	27	1	70	100	4	23	M20
32	140	22	2	80	105	4	19	M16	32	140	24	2	80	105	4	19	M16	29	150	30	2	80	110	4	23	M20
40	160	22	2	90	120	4	23	M20	38	160	24	2	90	120	4	23	M20	35	175	32	2	90	130	4	25	M22
50	165	22	2	105	130	8	19	M16	50	165	26	2	105	130	8	19	M16	48	185	34	2	105	145	8	23	M20
65	200	26	2	130	160	8	23	M20	62	200	30	2	130	160	8	23	M20	57	220	38	2	130	175	8	25	M22
80	210	28	2	140	170	8	23	M20	75	210	32	2	140	170	8	23	M20	73	230	40	2	140	185	8	25	M22
100	240	32	2	160	195	8	25	M22	100	250	36	2	165	205	8	25	M22	98	270	44	2	165	220	8	27	M24
125	275	36	2	195	230	8	25	M22	120	300	40	2	200	250	8	27	M24	120	325	50	2	200	265	8	33	M30
150	325	38	2	235	275	12	27	M24	150	355	44	2	240	295	12	33	M30	146	365	54	2	240	305	12	33	M30
200	370	42	2	280	320	12	27	M24	200	405	50	2	290	345	12	33	M30	190	425	60	2	290	360	12	33	M30
250	450	48	2	345	390	12	33	M30	245	475	56	2	355	410	12	33	M30	238	500	68	2	355	430	12	39	M36
300	515	52	3	405	450	16	33	M30	295	540	60	3	410	470	16	39	M36	283	560	77	3	410	485	16	39	M36



Unless otherwise specified flange facing finish shall not be serrated

Concerning boltings (δ) used for those flanges shown below table metric system screw threads shall be applied.

참고자료 / 관플랜지 기준치수 (ANSI) *Reference Data / Flange Table (ANSI)*

CAST IRON PIPE FLANGE

BRONZE FLANGE

d	ANSI CLASS 125 ANSI B16.1-1975						ANSI CLASS 250 ANSI B16.1-1975						ANSI CLASS 150 ANSI B16.24-1979						ANSI CLASS 300 ANSI B16.24-1979						
	D	t	c	n	h	δ	D	t	g	c	n	h	δ	D	t	c	n	h	δ	D	t	c	n	h	δ
15	-	-	-	-	-	-	-	-	-	-	-	-	-	89	8	60	4	16	M14	95	13	67	4	16	M14
20	-	-	-	-	-	-	-	-	-	-	-	-	-	98	9	70	4	16	M14	117	13	83	4	19	M16
25	108	12	79	4	16	M14	124	18	68	89	4	20	M16	108	10	79	4	16	M14	124	15	89	4	19	M16
32	118	13	89	4	16	M14	133	19	78	98	4	20	M16	117	10	89	4	16	M14	133	16	98	4	19	M16
40	127	15	98	4	16	M14	156	21	91	114	4	23	M20	127	11	98	4	16	M14	156	18	114	4	23	M20
50	152	16	121	4	20	M16	165	23	106	127	8	20	M16	152	13	121	4	19	M16	165	19	127	8	23	M20
65	178	18	140	4	20	M16	191	26	125	149	8	23	M20	178	14	140	4	19	M16	191	21	149	8	23	M20
80	191	19	152	4	20	M16	210	29	144	168	8	23	M20	191	16	152	4	19	M16	210	23	168	8	23	M20
100	229	24	191	8	20	M16	254	32	176	200	8	23	M20	229	17	191	8	19	M16	254	27	200	8	23	M20
125	254	24	216	8	23	M20	279	35	211	235	8	23	M20	254	19	216	8	23	M20	279	28	235	8	23	M20
150	279	26	241	8	23	M20	318	37	246	270	12	23	M20	279	21	241	8	23	M20	318	30	270	12	23	M20
200	343	29	299	8	23	M20	381	42	303	330	12	26	M22	343	24	298	8	23	M20	381	35	330	12	25	M22
250	406	31	362	12	26	M22	445	48	357	387	16	30	M27	406	25	362	12	25	M22	-	-	-	-	-	-
300	483	32	432	12	26	M22	521	51	418	451	16	33	M30	483	27	432	12	25	M22	-	-	-	-	-	-

d	ANSI CLASS 150 ANSI B16.5-1977						
	D	t	g	c	n	h	&
15	88.9	11.2	35.1	60.5	4	15.7	M14
20	98.6	12.7	42.9	69.9	4	15.7	M14
25	108	14.2	50.8	79.2	4	15.7	M14
32	117.3	15.7	63.5	88.9	4	15.7	M14
40	127	17.5	73.2	98.6	4	15.7	M14
50	152.4	19.1	91.9	120.7	4	19.1	M16
65	177.8	22.4	104.6	139.7	4	19.1	M16
80	190.5	23.9	127	152.4	4	19.1	M16
100	228.6	23.9	157.2	190.5	8	19.1	M16
125	254	23.9	185.7	215.9	8	22.4	M20
150	279.4	25.4	215.9	241.3	8	22.4	M20
200	342.9	28.4	269.7	298.5	8	22.4	M20
250	406.4	30.2	323.9	362	12	25.4	M22
300	482.6	31.8	381	431.8	12	25.4	M22

d	ANSI CLASS 300 ANSI B16.5-1977						
	D	t	g	c	n	h	&
15	95.2	14.2	35.1	66.5	4	15.7	M14
20	117.3	15.7	42.9	82.6	4	19.1	M16
25	123.9	17.5	50.8	88.9	4	19.1	M16
32	133.3	19.1	63.5	98.6	4	19.1	M16
40	155.4	20.6	73.2	114.3	4	22.4	M20
50	165.1	22.4	91.9	127	8	19.1	M16
65	190.5	25.4	104.6	149.4	8	22.4	M20
80	209.5	28.4	127	168.1	8	22.4	M20
100	254	31.8	157.2	200.2	8	22.4	M20
125	279.4	35.1	185.7	235	8	22.4	M20
150	317.5	36.6	215.9	269.7	12	22.4	M20
200	381	41.1	269.7	330.2	12	25.4	M22
250	444.5	47.8	323.9	387.4	16	28.4	M26
300	520.7	50.8	381	450.9	16	31.8	M30

참고자료 / 관플랜지 기준치수 (ANSI) *Reference Date / Flange Table (ANSI)*

d	ANSI CLASS 400 ANSI B16.5-1977						
	D	t	g	c	n	h	&
15	95.2	14.2	35.1	66.5	4	15.7	M14
20	117.3	15.7	42.9	82.6	4	19.1	M16
25	123.9	17.5	50.8	88.9	4	19.1	M16
32	133.3	20.6	63.5	98.6	4	19.1	M16
40	155.4	22.4	73.2	114.3	4	22.4	M20
50	165.1	25.4	91.9	127	8	19.1	M16
65	190.5	28.4	104.6	149.4	8	22.4	M20
80	209.5	31.8	127	168.1	8	22.4	M20
100	254	35.1	157.2	200.2	8	25.4	M22
125	279.4	38.1	185.7	235	8	25.4	M22
150	317.5	41.1	215.9	269.7	12	25.4	M22
200	381	47.8	269.7	330.2	12	28.4	M26
250	444.5	53.8	323.9	387.4	16	31.8	M30
300	520.7	57.2	381	450.9	16	35.1	M33

d	ANSI CLASS 600 ANSI B16.5-1977						
	D	t	g	c	n	h	&
15	95.2	14.2	35.1	66.5	4	15.7	M14
20	117.3	15.7	42.9	82.6	4	19.1	M16
25	123.9	17.5	50.8	88.9	4	19.1	M16
32	133.3	20.6	63.5	98.6	4	19.1	M16
40	155.4	22.4	73.2	114.3	4	22.4	M20
50	165.1	25.4	91.9	127	8	19.1	M16
65	190.5	28.4	104.6	149.4	8	22.4	M20
80	209.5	31.8	127	168.1	8	22.4	M20
100	273	38.1	157.2	215.9	8	25.4	M22
125	330.2	44.5	185.7	266.7	8	28.4	M26
150	355.6	47.8	215.9	292.1	12	28.4	M26
200	419.1	55.6	269.7	349.3	12	31.8	M30
250	508	63.5	323.9	431.8	16	35.1	M33
300	558.8	66.5	381	489	20	35.1	M33

d	ANSI CLASS 900 ANSI B16.5-1977						
	D	t	g	c	n	h	&
15	120.7	22.4	35.1	82.6	4	22.4	M20
20	130	25.4	42.9	88.9	4	22.4	M20
25	149.4	28.4	50.8	101.6	4	25.4	M22
32	158.8	28.4	63.5	111.3	4	25.4	M22
40	177.8	31.8	73.2	124	4	28.4	M26
50	215.9	38.1	91.9	165.1	8	25.4	M22
65	244.3	41.1	104.6	190.5	8	28.4	M26
80	241.3	38.1	127	190.5	8	25.4	M22
100	292.1	44.5	157.2	235	8	31.8	M30
125	349.3	50.8	185.7	279.4	8	35.1	M33
150	381	55.6	215.9	317.5	12	31.8	M30
200	469.9	63.5	269.7	393.7	12	38.1	M36
250	546.1	69.9	323.9	469.9	16	38.1	M36
300	609.6	79.2	381	533.4	20	38.1	M36





HSN(株) 曉伸産業 **HSN** HYO SHIN INDUSTRIAL CORP.

644-2, DAMAN-RI, JINRYE-MYON, KIM-HAE, KYUNG NAM, KOREA

TEL : 82-55-346-0622 TEL : 82-55-346-0655 TEL : 82-55-346-0633 FAX : 82-55-346-2235

www.hsnvalve.com