

# Hy-Lok 115 Series

## Ball Valves to DIN Standard

Catalog No. H-115BV  
Jun. 2003

### Handle

- can be fitted in 8 positions with 45° increment
- is available in cast stainless steel (standard) and zinc plated carbon steel (optional)

### Variety of End Connections

- include DIN 2353 'L' & 'S' series, Male & Female DIN/ISO/BSP and NPT.

### Rugged Body Construction

- is machined from bar stock
- is available in stainless steel and zinc plated carbon steel.

## Features

- **Pressure rating** up to 500bar @ 21°C
- **Temperature rating** from -20°C to 100°C with POM and NBR standard.
- **Conforms to DIN standard**
- **Compact design** with max orifice
- **100% factory tested.**

### Locking Device

- is available as option.
- ### Indicator on Washer
- allows easy identification of flow direction.

### Stem and End Seals

- include NBR (standard), Viton and EPDM(optional).

### Orifice

- is maximized for minimal pressure drop
- ranges from DN 4 to DN 25.
- is available up to DN80 upon request.

### Ball Seats

- are available in POM-MoS<sub>2</sub>(standard) and PTFE(optional).

### Floating Ball

- is machined from bar stock
- is available in stainless steel and hard chrome plated carbon steel.



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## Tables of Dimensions

### DIN 2353 Light Series Tube (L)

Basic Part No.	Tube O.D.	DN <sup>(1)</sup>	PB <sup>(2)</sup>	B	H	h	h <sub>1</sub>	L	l	l <sub>1</sub>	R	Thread T	Weight (kg)
BVDT - 6L	6	4	315	26	33	13.5	83	67	40	10	115	M12 × 1.5	0.4
BVDT - 8L	8	6	315	26	33	13.5	83	67	40	10	115	M14 × 1.5	0.4
BVDT - 10L	10	6	315	26	33	13.5	83	74	40	11	115	M16 × 1.5	0.5
BVDT - 12L	12	10	315	32	38	17.5	88.5	74	43	11	115	M18 × 1.5	0.6
BVDT - 15L	15	13	315	35	40	19	90	82	48	12	115	M22 × 1.5	0.7
BVDT - 18L	18	13	315	35	40	19	90	82	48	12	115	M26 × 1.5	0.8
BVDT - 22L	22	20	160	49	57	24.5	113	101	62	14	159	M30 × 2.0	2.1
BVDT - 28L	28	25	160	58	65	29.5	121	108	66.2	14	159	M36 × 2.0	2.3
BVDT - 35L	35	25	160	58	65	29.5	121	112	66.2	16	159	M45 × 2.0	2.3

### DIN 2353 Heavy Series Tube (S)

Basic Part No.	Tube O.D.	DN <sup>(1)</sup>	PB <sup>(2)</sup>	B	H	h	h <sub>1</sub>	L	l	l <sub>1</sub>	R	Thread T	Weight (kg)
BVDT - 8S	8	4	500	26	33	13.5	83	73	40	12	115	M16 × 1.5	0.4
BVDT - 10S	10	6	500	26	33	13.5	83	73	40	12	115	M18 × 1.5	0.4
BVDT - 12S	12	6	500	32	38	17.5	88.5	76	43	12	115	M20 × 1.5	0.5
BVDT - 14S	14	10	500	32	38	17.5	88.5	80	43	14	115	M22 × 1.5	0.6
BVDT - 16S	16	13	400	35	40	19	90	86	48	14	115	M24 × 1.5	0.7
BVDT - 20S	20	13	400	35	40	19	90	90	48	16	115	M30 × 2.0	0.8
BVDT - 25S	25	20	315	49	57	24.5	113	109	62	18	159	M36 × 2.0	2.1
BVDT - 30S	30	25	315	58	65	29.5	121	120	66.2	20	159	M42 × 2.0	2.3
BVDT - 38S	38	25	315	58	65	29.5	121	124	66.2	22	159	M52 × 2.0	2.3

### Female DIN / ISO 228 / BSP

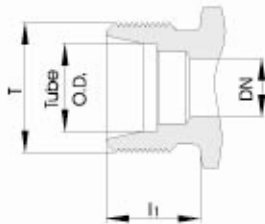
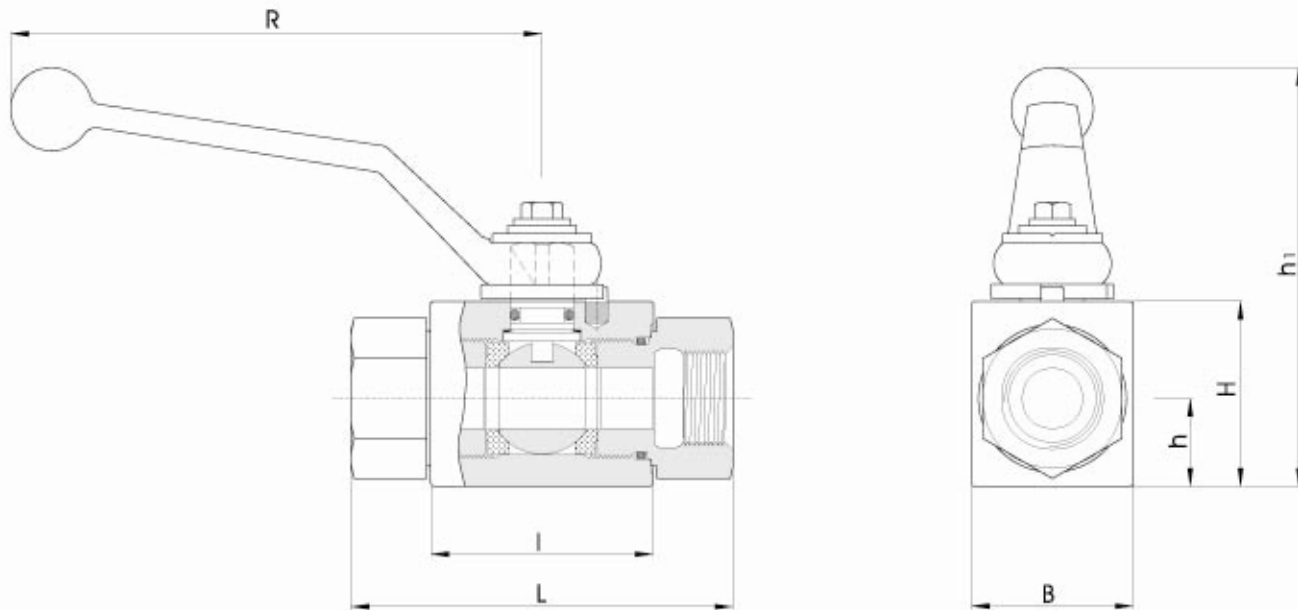
Basic Part No.	DN <sup>(1)</sup>	PB <sup>(2)</sup>	B	H	h	h <sub>1</sub>	L	l	l <sub>1</sub>	R	Thread T	Weight (kg)
BVDF - 2G	6	500	26	33	13.5	83	68.8	40	10	115	PF 1/8"	0.4
BVDF - 4G	6	500	26	33	13.5	83	68.8	40	14	115	PF 1/4"	0.4
BVDF - 6G	10	500	32	38	17.5	88.5	71.9	43	14	115	PF 3/8"	0.6
BVDF - 8G	13	500	35	40	19	90	82.3	48	16.5	115	PF 1/2"	0.7
BVDF - 12G	20	315	49	57	24.5	113	95.4	62	18	159	PF 3/4"	1.6
BVDF - 16G	25	315	58	65	29.5	121	112.7	66.2	20	159	PF 1"	2.3
BVDF - 20G	25	315	58	65	29.5	121	120	66.2	22	159	PF 1 1/4"	2.3

### Female NPT (ANSI / ASME B1.20.1)

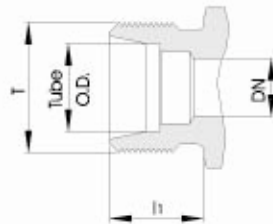
Basic Part No.	DN <sup>(1)</sup>	PB <sup>(2)</sup>	B	H	h	h <sub>1</sub>	L	l	l <sub>1</sub>	R	Thread T	Weight (kg)
BVDF - 4N	6	500	26	33	13.5	83	68.8	40	15	115	NPT 1/4"	0.4
BVDF - 6N	10	500	32	38	17.5	88.5	78	43	15	115	NPT 3/8"	0.6
BVDF - 8N	13	500	35	40	19	90	104	48	20.5	115	NPT 1/2"	0.7
BVDF - 12N	20	315	49	57	24.5	113	102	62	21.5	159	NPT 3/4"	1.6
BVDF - 16N	25	315	58	65	29.5	121	119	66.2	25.4	159	NPT 1"	2.3
BVDF - 20N	25	315	58	65	29.5	121	130	66.2	25.4	159	NPT 1 1/4"	2.3

**Note :** (1) DN is the max orifice.  
DN is available up to DN80 upon request.  
Please consult local authorized Hy-Lok representative  
(2) PB in bar with a safety factor of 1.5.

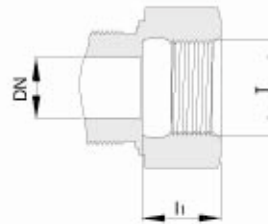
All dimensions are in millimeters.  
Tube connections complete with sleeves and nuts.



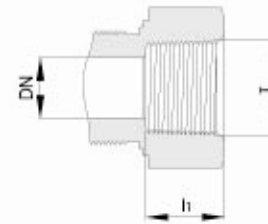
Tube Connection  
DIN 2353  
Light Series(L)



Tube Connection  
DIN 2353  
Heavy Series(S)



Female Thread  
BSP  
DIN / ISO 228 / BSP



Female Thread  
NPT  
ASME / ANSI B1.20.1

## Technical Data

### Materials of Construction

Description	Specification / Grade			
	Valve Body Materials			
	SS316		Carbon Steel	
	ASTM	DIN	ASTM	DIN
Body				
End Connector	A479 / SS316	17440 / 1.4571	A108 / 12L14	1651 / 9SMn28K
Stem				
Ball	316 Stainless Steel			
Ball Seats*	POM - MoS <sub>2</sub> (Standard)			
Stem & End Seals*	NBR (Standard)			
Handle	SS316		Carbon Steel	
Locking Device	Stainless Steel			

Note : \*-\*marked are wetted parts. Lubricant is silicone based.

### Temperature Rating

#### Seals

Materials	Temperature Rating
NBR(Buna N)	-23 °C to 121 °C
Viton	-23 °C to 200 °C
EPDM	-46 °C to 149 °C

#### Ball Seats

Materials	Temperature Rating
POM - MoS <sub>2</sub>	-30 °C to 100 °C
PTFE	-54 °C to 65 °C

## General Information

### Applications

- Hydraulic fluids, compressed air, lubricants, and fuel oil systems

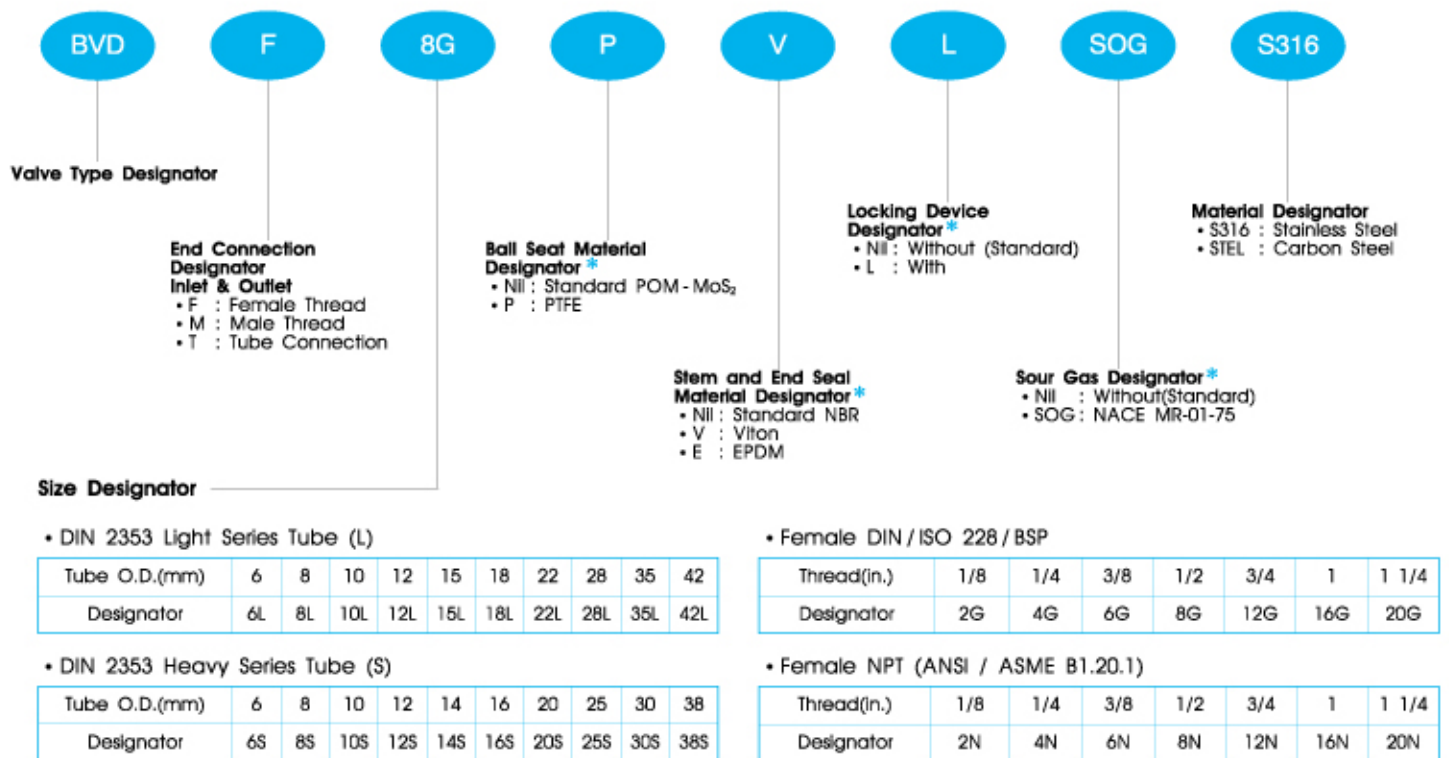
### Sour Gas Service

- Is provided to meet NACE Standard MR-01-75.

### Testing

- Each valve is tested with nitrogen @ 1000psig(69bar) to max leak rate of 0.1SCCM.
- Hydrostatic shell test is performed at 1.5 times the working pressure as an option.
- Optional tests are available upon request.

## Ordering Information



**Note\*:** No designator is required for standard, e.g. BVDF-8G-S316.

## SAFETY in VALVE SELECTION

Proper installation, materials compatibility, operation and maintenance of these valves are the responsibility of the user. The total system design must be taken into consideration to ensure optimal performance and safety.

### ■ QUALITY SYSTEM CERTIFICATES



ISO 9001  
CERTIFICATE NO.GQC 212

ASME SECT III (MO)  
CERTIFICATE NO. GSC 584

### ■ TYPE APPROVALS (For DIN 2353 Tube Fittings)



American Bureau Shipping  
CERTIFICATE NO.00-8K50258-X



Lloyd's Register  
CERTIFICATE NO.01/10076



GERMANISCHER LLOYD  
CERTIFICATE NO.40297-01 HH



DET NORSKE VERITAS  
CERTIFICATE NO.P-10967



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