

LIV SLIMLINE
MONOFLANGE VALVES

SERIES SH
Large Bore

Principle

LIV Slimline Monoflange valve solutions for single block, single block & bleed, double block & bleed and double block configurations. Monoflange solutions offer the greatest cost, weight, and space saving with isolation and vent valves incorporated into the process interface with simplified installation. Monoflange valves are offered in flange to thread configuration. Flange to flange configuration on request.

Features

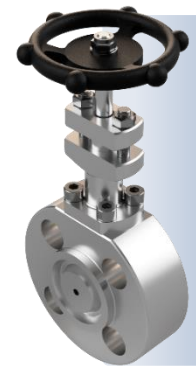
Reduced potential leak points compared to traditional to 3 valve combination, lower weight, reduced loading and vibration stresses, and space saving. The primary shut off valves can be supplied as process valves with outside screw and yoke (OS&Y). The operation is with handwheel or T-bar.

Construction

- The valve body is machined from a round bar stock material.
- The raw material of the valve can be supplied according to
- NORSOK M 630 or to customer's specific requirements.
- Inlet is a flanged connection, outlet ½" NPT.
- The valve spindle thread is external to stuffing box.
- Valve with fire safe requirement is supplied with graphite packings.
- The valve has back seating and non-rotating valve tip.
- The bore size is 10 mm.
- The dust covers are coloured for application indication (isolate, vent).
- The valves are designed for PED 2014/68/EU.

Technical Data

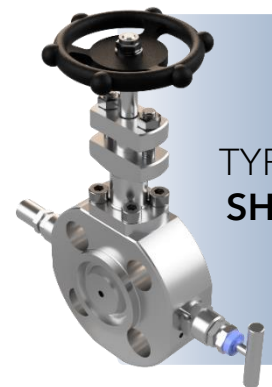
Size	½ - 3"
Pressure rating	150 lbs - 2500 lbs
Flange facing	RF or RTJ to ANSI B 16.5
Material	AISI 316, A350LF2, 22Cr Duplex, 25Cr Duplex, 6Mo, Titanium, Monel 400, Hastelloy C, Inconel 625 and 825
Packing	PTFE, Graphite.
Temperature	÷100 to +260 °C PTFE ÷50 to +500 °C Graphite
Operation	OS&Y, handwheel or T-bar, T-bar or Anti tamper.
Valve tip	Hardened
Coating	Standard offshore, to customer's spec., or none



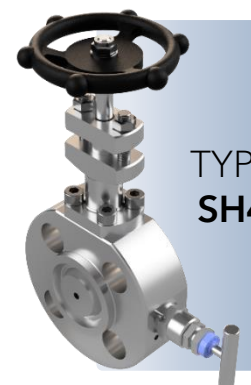
TYPE
SH1



TYPE
SH2



TYPE
SH3



TYPE
SH4



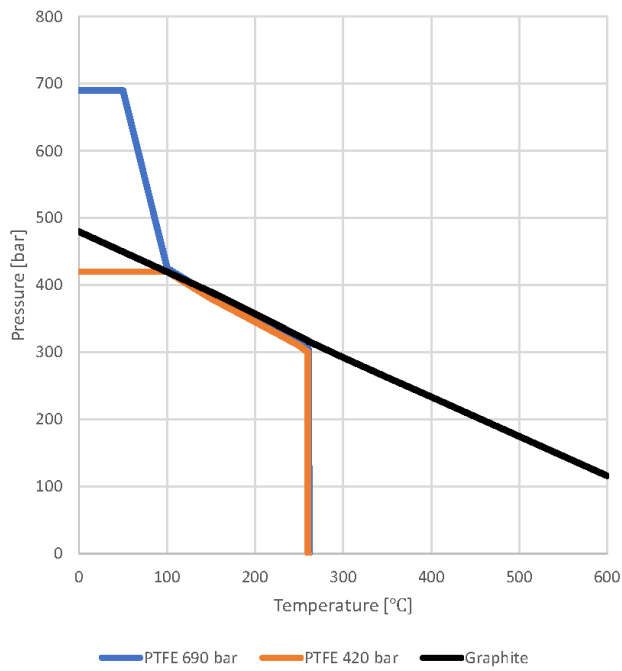
Testing and Documentation

- Material certificate to EN 10204-3.1
- Certificate of compliance to NACE MR 01-75 or EN 15156
- Cleaned for oxygen and hydrogen
- PMI test
- Pressure test certificate.
- Fire safe tested acc. to EN 10497-2010
- Penetrant test on valve body to ASME BPV, ISO 3452-1 2021
- Fugitive emission to ISO 15848-1 2017

Accessories

- 1/4" NPT plugs (for valves with bleed connection)
- Locking device for valve operation (only valves with handwheel)

Pressure and Temperature Rating



HOW TO ORDER

Choose a code for each of the configuration steps. For special orders, please reach out to our sales team.

1 VALVE TYPE			2 VALVE SIZE			3 PRESSURE RATING			4 FLANGE FACING						
SH1	Single block		3	½"		01	150 lbs		F	Raised face					
SH2	Block and bleed		4	¾"		03	300 lbs		J	Ring type joint					
SH3	Double B&B		5	1"		06	600 lbs								
SH4	Double block		6	1½"		15	1500 lbs								
			7	2"		25	2500 lbs								
			8	3"											
5 MATERIAL															
	<i>Body material</i>					<i>Trim material</i>									
01	A350 LF2					AISI 316									
02	A479 316					AISI 316									
03	A182 316					AISI 316									
04	A182 22Cr. Duplex					22Cr. Duplex									
06	A182 25Cr. Duplex					25Cr. Duplex									
08	A182 6Mo					6Mo									
10	Titanium					Titanium									
11	Monel 400					Monel 400									
12	Hastelloy C-279					Hastelloy C-279									
13	Inconel 625					Inconel 625									
14	Inconel 825					Inconel 825									
6 BONNET TYPES															
1	OS&Y			2	Needle			3	Anti-tamper			4	Anti-tamper lockable		
7 BONNET COMBINATIONS															
	SH1			SH2			SH3			SH4					
	Primary	Secondary	Vent	Primary	Secondary	Vent	Primary	Secondary	Vent	Primary	Secondary	Vent			
01	1	-	-	1	-	2	1	2	2	1	2	-			
02	2	-	-	1	-	3	1	2	3	1	3	-			
03	3	-	-	1	-	4	1	2	4	1	4	-			
04	4	-	-	2	-	2	1	3	3	2	2	-			
05	-	-	-	2	-	3	1	3	4	2	3	-			
06	-	-	-	2	-	4	2	2	2	2	4	-			
07	-	-	-	3	-	2	2	2	3	3	3	-			
08	-	-	-	3	-	3	2	2	4	3	2	-			
8 OS&Y OPERATION				9 SEALS				10 BLEED CONNECTION				11 CONNECTION OUTLET			
HH	Handwheel			T	PTFE Solid			14	¼" NPT Int.			1	½" NPT Int.		
HL	Handwheel lockable			G	Graphite			12	½" NPT Int.			2	¾" NPT Int.		
TB	T-bar											3	½" BSPT Int.		
00	None											4	¾" BSPT Int.		
												5	½" SW		
												6	¾" SW		
												7	Kidney Flange		

Example: SH3515J-04-02-HHGT121

Slim line valve double block and bleed, 1" 1500lbs RTJ face. Body material A182 22Cr. Duplex, trim material 22Cr Duplex. Primary isolate = OS&Y - Secondary isolate = Needle - Vent=Anti-tamper. OS&Y operation is a handwheel, seals is Graphite/PTFE/PTFE, ½"NPT int. vent connection, ½" NPT int. outlet connection.