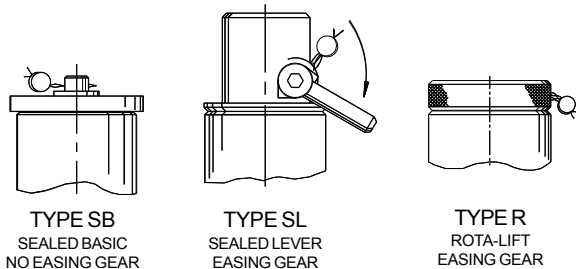


ILLUSTRATED SHOWING  
TYPE L  
LEVER LIFT  
EASING GEAR  
(OPTION NOT AVAILABLE AS 94615 TYPE)

ALTERNATIVE TOP FITTINGS



PARTS LIST & MATERIAL SPECIFICATION

	93615	94615**
1 SEAT	BRASS	ST.STL.
2 DISC	ST.STL. 316	ST.STL. 440B
3 BALL	ST.STL.	
4 DISC HOLDER	ST.STL.	
5 PLUNGER	ST.STL.	
6 BODY	ST.STL.	
7 SPRING	ST.STL.	
8 ADJUSTER	BRASS	ST.STL.
9 SPINDLE	ST.STL.	
10 CAP	BRASS	ST.STL.
	TYPE SL - ST.STL.	
11 WIRE & SEAL	ST.STL. & LEAD	
12 LEVER	BRASS	ST.STL.*
13 O'RING	TO SUIT APPLICATION	

\* TYPE SL ONLY  
\*\* 94615 TYPE VALVES, SEE 'TYPE L' OPTION NOTES.

APPROVALS

Designed in accordance with BS EN ISO 4126:1.  
TÜV Approved:- Ref- TÜV.SV.\*\*-1016.15.D/G.0,74.p. For 3-28 Bar.g. Below 3 Bar.g see ' $\alpha_w$  vs Set Pressure' chart. 93615 type materials meet the requirements of BAM (Germany) for oxygen service. P.E.D. 2014/68/EU  
Type examination module B, Cert. No. 01 202 642-B-10017  
Quality management system module D, Cert. No. COV0812369/01

TECHNICAL DATA

Relieving pressure = Set pressure +10%, 0.1 Bar.g below 1.0 Bar.g.  
Reseating pressure = Set pressure -10%, 0.3 Bar.g below 3.0 Bar.g.  
Maximum set pressure = 28 Bar.g.  
Minimum set pressure = 0.3 Bar.g.  
Flow area = 177mm<sup>2</sup>  
Inlet bore diameter = 15 mm  
TÜV allotted outflow coefficient  $\alpha_w$  = 0.74  
TÜV allotted outflow coefficient  $\alpha_w$  = Below 3.0 Bar.g see ' $\alpha_w$  vs set pressure' chart.  
Leak tightness at 90% set pressure to API 527 and in accordance with BS6759 Part 3 1984, Table 9 Grade 2. Greater leak tightness may be achieved on request.  
Maximum temperature = 250°C Note: For sealed top fittings, max temp dependent on seal material.  
Minimum temperature = -196°C subject to material specification.  
Maximum permissible built up back pressure = 10% of set pressure at or below which flow is not reduced.  
Stable operation on flows down to 50% of valve rated capacity.  
FOR FURTHER INFORMATION, INSTALLATION AND OPERATION INSTRUCTIONS, CONVERSION FACTORS ETC. SEE TECHNICAL INFORMATION SECTION.

SHEET 1 OF 3 SHEETS



**SEETRU LIMITED**  
ALBION DOCKSIDE WORKS, BRISTOL. BS16UT  
TELEPHONE +44 (0) 117 930 6100, FAX +44 (0) 117 929 8193  
www.seetru.com info@seetru.com

15mm Nominal Bore METAL SEAL  
DIRECT SPRING LOADED ENCLOSED  
DISCHARGE SAFETY VALVE FOR  
COMPRESSED AIR, GASES & STEAM

ENCLOSED DISCHARGE  
15mm NOMINAL BORE SERIES  
TYPE 93615 BRASS  
TYPE 94615 ST.STL.

## FLOW CHART

-TO CALCULATE INTERMEDIATE FLOWS SEE TECHNICAL INFORMATION SECTION

-FOR LOWER FLOWS REFER TO 10mm BORE TYPE 93610 DATA SHEET. FOR GREATER FLOWS REFER TO 20mm BORE TYPE 93620 DATA SHEET.

SET PRESSURE Bar.g	0.3	0.5	1.0	2.0	3	4	5	6	7	8	9	10	15	20	25	28
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH BS6759, AIR AT 15°C AND 1013 mbar std. Litres/s	22.5	29.2	42.2	76.6	108	136	163	191	219	246	274	302	440	578	716	799
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH BS6759 PART 1, STEAM Kg/h	61.3	79.7	120.8	204.2	296	372	447	523	598	674	749	825	1202	1580	1958	2184
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH TUV, AIR AT 0°C AND 1013 mbar Normal m³/h	75.8	103.8	155.3	270.1	384	482	580	678	776	874	972	1070	1560	2049	2539	2833
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH TUV, STEAM Kg/h	63.3	82.5	121.7	213.4	299	373	446	520	592	666	738	812	1174	1535	1900	2116

\* DISCHARGING TO ATMOSPHERE

## O'RING SEAL CHART

	O'RING MATERIAL	10th DIGIT	MAX. STATIC TEMP. °C	MIN. STATIC TEMP. °C
	NITRILE	1	150	-30
	VITON®	3	250	-20
	SILICONE	4	250	-50
	NEOPRENE	5	120	-40
	E.PROPYLENE	6	150	-40
#	P.T.F.E.	7	250	-196

Note:

Digits '1 - 7' indicates the required O'ring material dependent on the maximum / minimum static temperature.

Example:

Ordering code 93615A 410 3 is Brass seated, Sealed leverlift **Type SL**, with 3/4" BSP parallel MALE inlet connection, 1 1/2" BSP parallel outlet connection, with Viton® O'ring seals.

# For cryogenic service Type 'S' valves only.

**TYPE 94615 VALVES ARE NOT SUITABLE FOR CRYOGENIC SERVICE. USE 93615 TYPE 'S'.**

## VALVE SELECTION CHART

Standard thread sizes shown, other sizes may be available

INLET CONNECTION	OUTLET CONNECTION	ORDERING CODE	TOP FITTING CODE			
			R	SB	SL	L**
G 3/4 (3/4" BSP PARALLEL MALE)	G 1 1/2 (1 1/2" BSP PARALLEL)	93615A 94615A	210	130	410	330
R 3/4 (3/4" BSP TAPER MALE)			211	131	411	331
G 3/4 (3/4" BSP PARALLEL FEMALE)		93615D 94615D	210	130	410	330

Example 1:

Ordering code 93615A 210 3 is Brass seated, Rota lift Type R, with 3/4" BSP parallel MALE inlet connection, 1 1/2" BSP parallel outlet connection, with Viton® O'ring.

Example 2:

Ordering code 93615D 210 3 is Brass seated, Rota lift Type R, with 3/4" BSP parallel FEMALE inlet connection, 1 1/2" BSP parallel outlet connection, with Viton® O'ring.

\*\* TYPE L NOT AVAILABLE ON 94615



**SEETRU LIMITED**

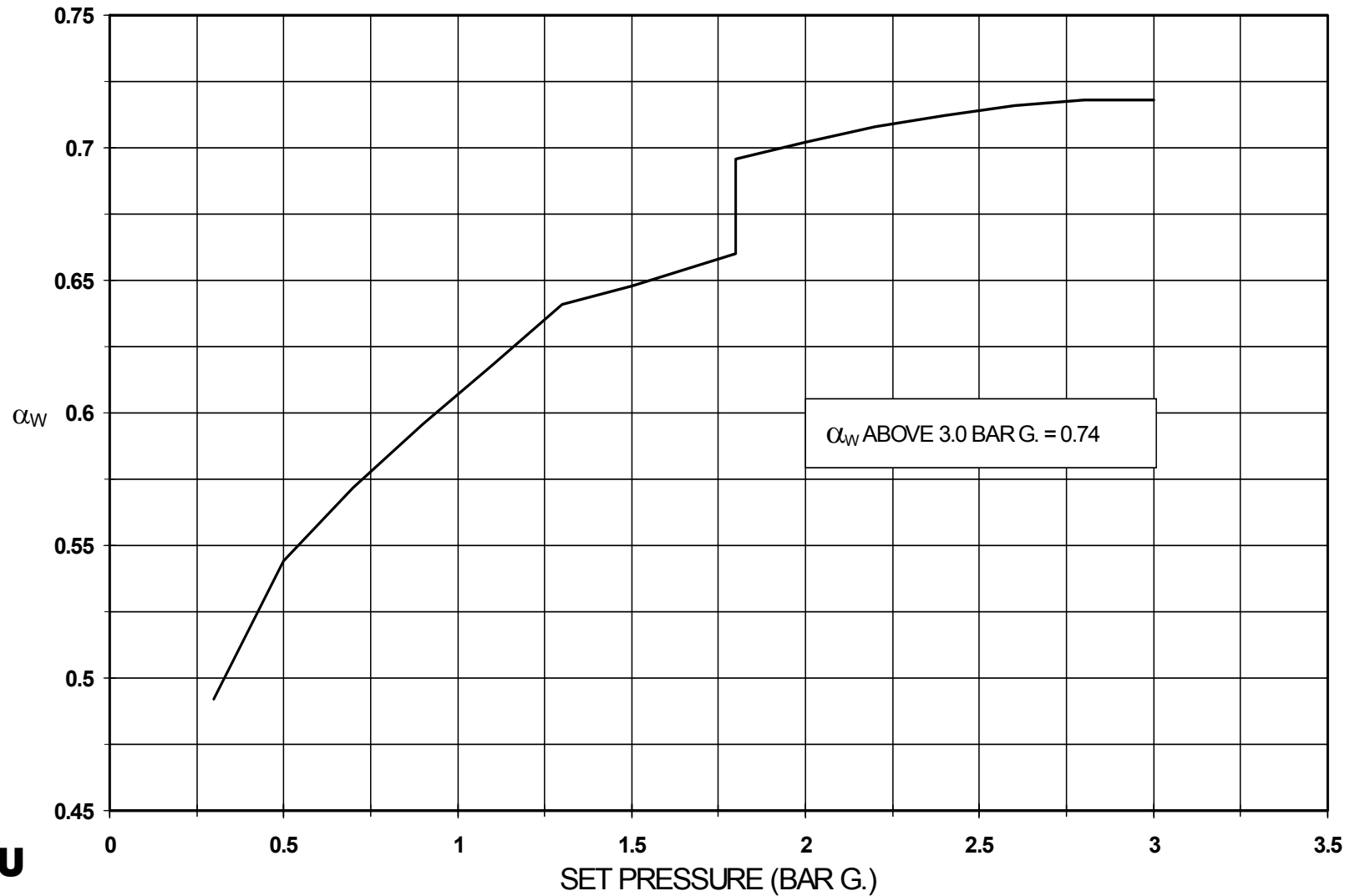
ALBION DOCKSIDE WORKS, BRISTOL. BS16UT  
TELEPHONE +44 (0) 117 930 6100, FAX +44 (0) 117 929 8193  
www.seetru.com info@seetru.com

15mm Nominal Bore METAL SEAL  
DIRECT SPRING LOADED ENCLOSED  
DISCHARGE SAFETY VALVE FOR  
COMPRESSED AIR, GASES & STEAM

ENCLOSED DISCHARGE  
15mm NOMINAL BORE SERIES  
TYPE 93615 BRASS  
TYPE 94615 ST.STL.

SHEET 2 OF 3 SHEETS

$\alpha_w$  vs SET PRESSURE CHART  
 SEETRU SAFETY RELIEF VALVE 93615 / 94615.  
 0.3 to 3.0 BAR G.



**SEETRU LIMITED**  
 ALBION DOCKSIDE WORKS, BRISTOL. BS16UT  
 TELEPHONE +44 (0) 117 930 6100, FAX +44 (0) 117 929 8193  
 www.seetru.com info@seetru.com

15mm Nominal Bore METAL SEAL  
 DIRECT SPRING LOADED ENCLOSED  
 DISCHARGE SAFETY VALVE FOR  
 COMPRESSED AIR, GASES & STEAM

ENCLOSED DISCHARGE  
 15mm NOMINAL BORE SERIES  
 TYPE 93615 BRASS  
 TYPE 94615 ST.STL.

SHEET 3 OF 3 SHEETS