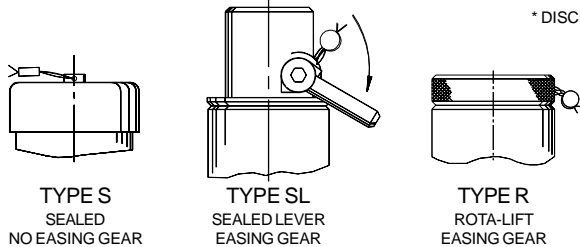


ILLUSTRATED SHOWING
TYPE L
LEVER LIFT
EASING GEAR

ALTERNATIVE TOP FITTINGS



TYPE S
SEALED
NO EASING GEAR

TYPE SL
SEALED LEVER
EASING GEAR

TYPE R
ROTA-LIFT
EASING GEAR

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	ORING	TO SUIT APPLICATION	

*TYPE SL ONLY

APPROVALS

Designed in accordance with BS6759 (but not approved) & ISO 4126.
TÜV Approved:- Ref- TÜV.SV.98-1016.15.D/G.0.74p ; For 3-28 Bar.g. Below 3 Bar.g. see 'α_b vs Set Pressure' chart.
93615 type materials meet the requirements of BAM (Germany) for oxygen service.
P.E.D. 97/23/EC
Type examination module B, Cert. No. 01 202 111-B-00017
Quality management system module D, Cert. No. EDS 002011/01

TECHNICAL DATA

Relieving pressure = Set pressure +10%, 0.1Bar.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 = 177mm²
Inlet bore diameter = 15 mm
TÜV Derated coefficient of discharge α_b = 0.74, BELOW 3.0 BAR.G. SEE 'α_b 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.

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 TÜV, AIR AT 0°C AND 1013 mbar Normal m ³ /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 TÜV, 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



SEETRU LIMITED

ALBION DOCKSIDE WORKS, BRISTOL. BS1 6UT
TELEPHONE +44 (0) 117 927 9204, FAX +44 (0) 117 929 8193
www.seetru.com enquires@seetru.com

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

SHEET 1 OF 3 SHEETS

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

VALVE SELECTION CHART

Standard thread sizes shown, other sizes may be available

INLET CONNECTION	OUTLET CONNECTION	ORDERING CODE	TOP FITTING CODE			
			R	S	SL	L
G 3/4 (3/4" BSP PARALLEL MALE)	G 1 1/2 (1 1/2" BSP PARALLEL)	93615A	210	130	410	330
R 3/4 (3/4" BSP TAPER MALE)		94615A	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.

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'.



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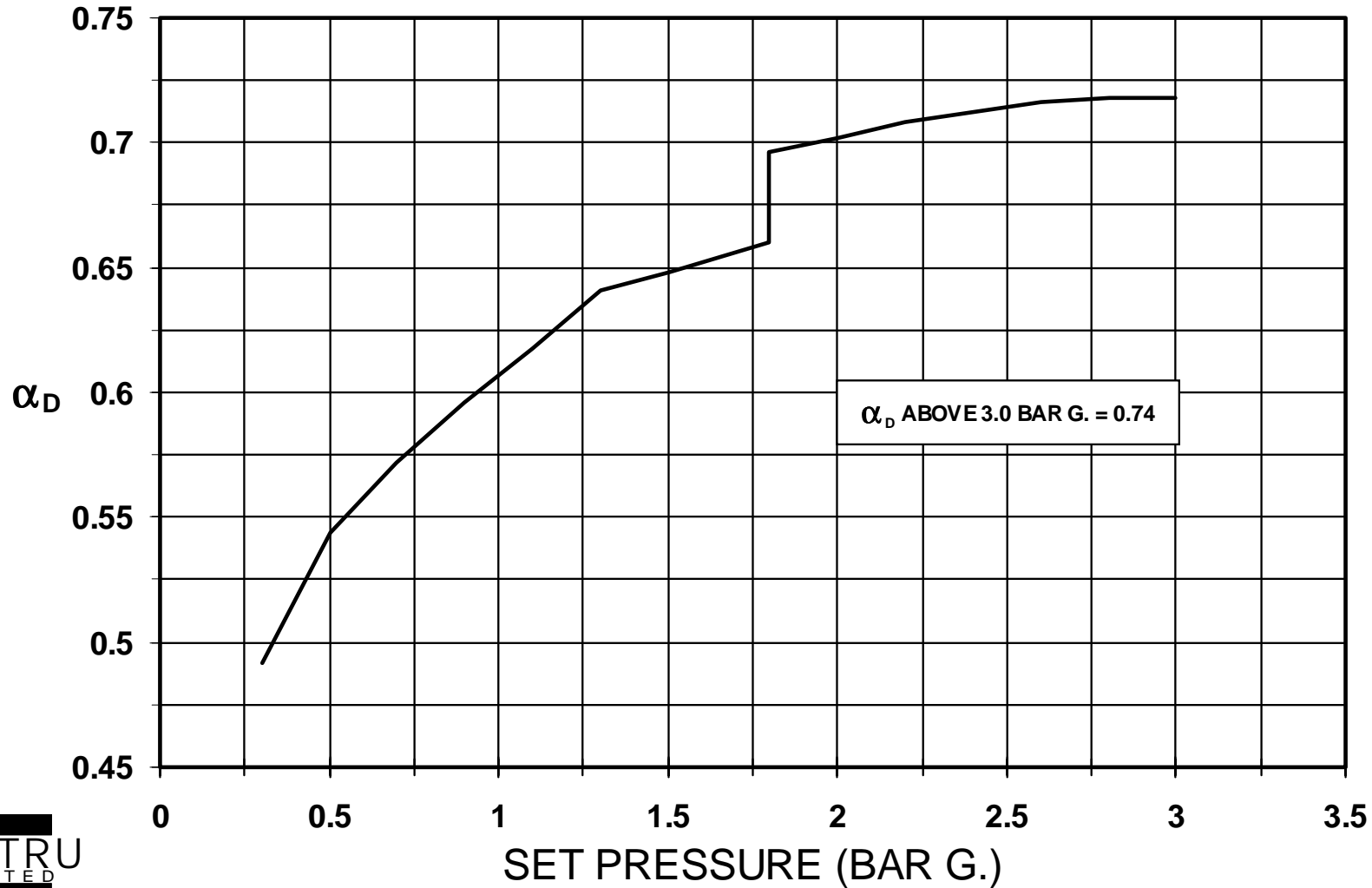
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ENCLOSED DISCHARGE
15mm NOMINAL BORE SERIES
TYPE 93615 BRASS
TYPE 94615 ST.STL.

SHEET 2 OF 3 SHEETS

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



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SHEET 3 OF 3 SHEETS

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