STRAINERS AND SIGHT GLASSES

FLOWTURN®

APV

AUSTRALIAN PIPELINE VALVE®

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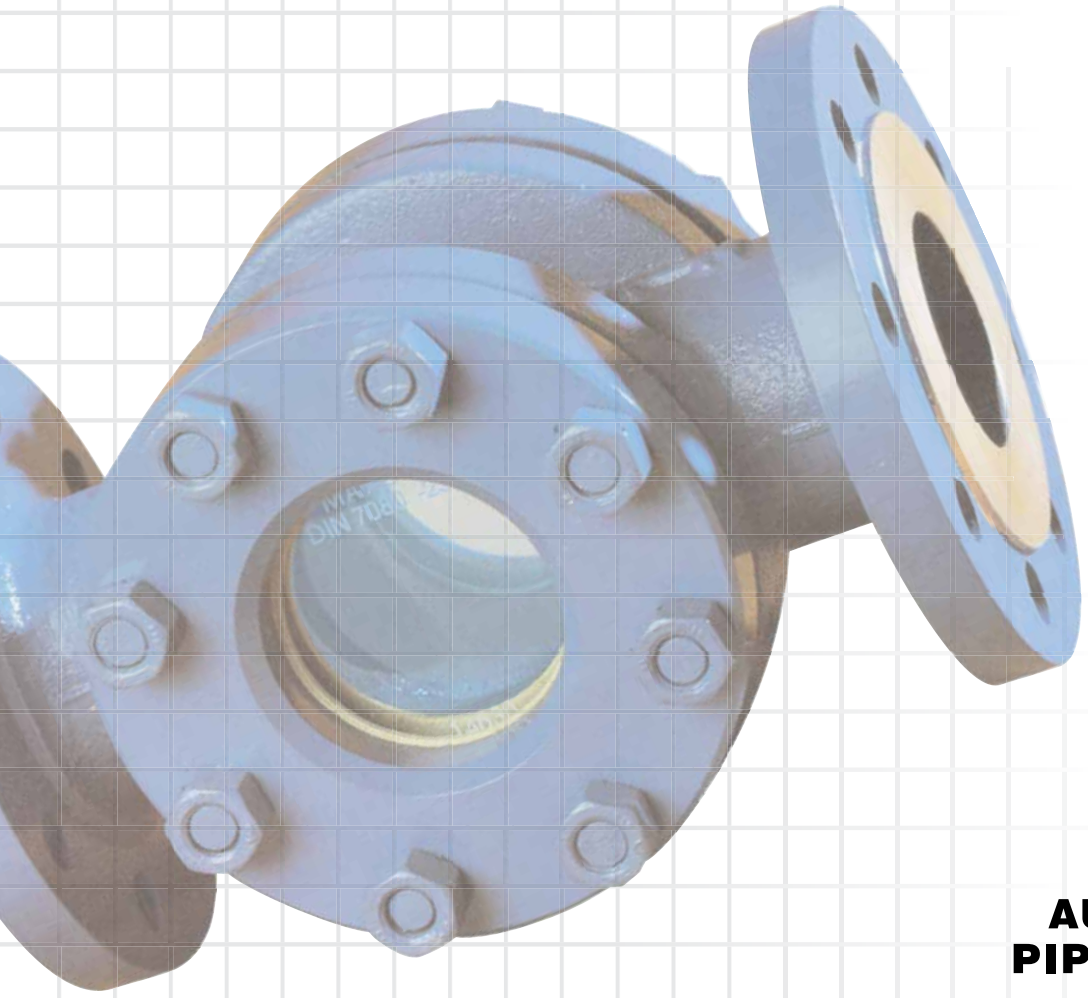
QUALITY VALVE MANUFACTURER

QUALITY COMMITMENT

Quality is Our First Priority.

Consistent product quality and a proven track record makes Australian Pipeline Valve a dependable choice where total reliability is the number one concern.

Since its founding, APV's philosophy has been focused on quality. Our valves are manufactured in full compliance to worldwide standards (such as ASME/ANSI, API, EN, ISO, BS, AS).



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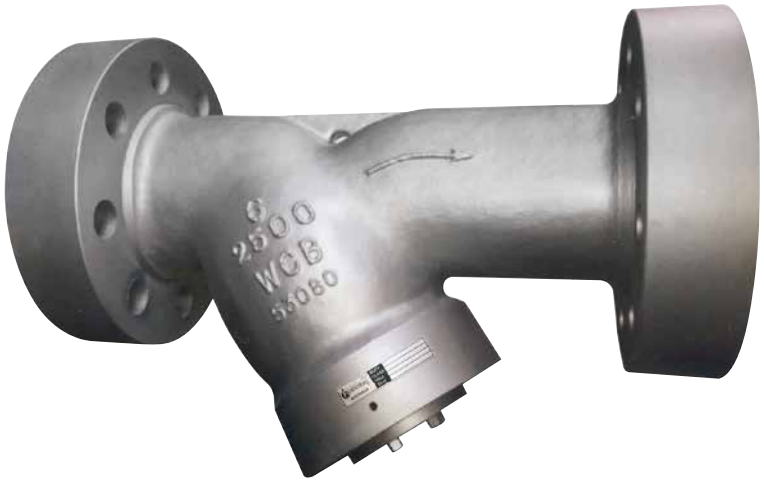
CONTENTS

Sight Glass / Flow Indicator Integral Model SLSG	4
See Through Sightglass SFL01-02 - Flanged	6
Combination Sight Glass / Check Valve Flanged	9
Y-Type Strainer Integral Cast Iron	10
Y-Type Strainer Integral Cast Iron - PN25	12
Y-Type Strainer Integral Cast Steel	14
Y-Type Strainer Forged Steel	16
Globe Strainer Integral Cast Steel	18
Basket Strainer Integral Cast	20
Duplex Strainer Integral Dual Basket	24
3 in 1 Strainer Model TKV Expansion Joint Flow Conditioner	25
Magnetic Screen Option	27
Technical Considerations	28



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SIGHT GLASS / FLOW INDICATOR
MODEL SLSG 150~600LB INTEGRAL FLANGED

Model SLSG125CI (Iron) Model SLSG150CS (Steel) Model SLSG150SS (S/S)

PRESSURE RATINGS

Fully ASME 150~600LB rated available up to ANSI 600 Class.
For body and glass ratings refer to drawing.
Flowturn sight glasses areavailable with full pressure rated and tested glass to match full ASME pressure rating.

APPLICATIONS

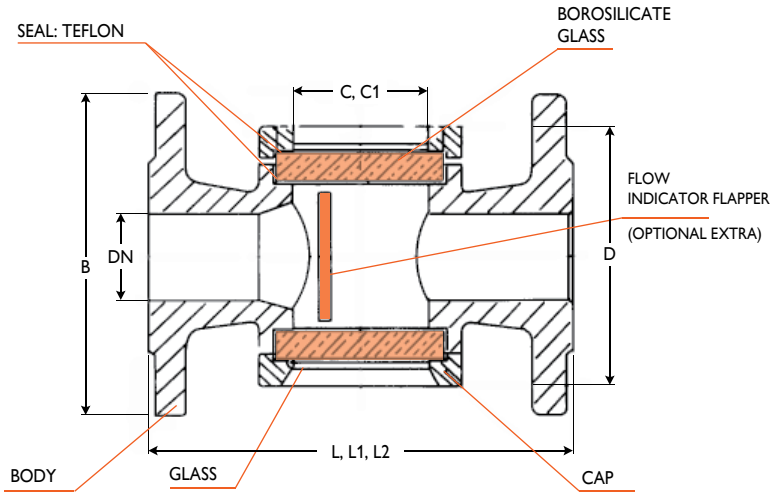
Water, oil water, air and gas.
For corrosive/abrasive fluids check material grades for compatibility.

LININGS

Special linings, coatings on request.

END CONNECTIONS

Flanged AS Table D & E, EN, ISO, PN10, PN16, PN25, PN40, ASME 125, 150, 300, 600.



DIMENSIONS (MM) FLANGED SIGHT GLASS 150LB

Size (mm)	15	20	25	40	50	65	80	100	150	200	250	300
Size (inch)	0.5	0.75	1	1.5	2	2.5	3	4	6	8	10	12
L	130	130	130	166	180	230	240	260	390	600	410	490
L1	135	135	170	174	200	245	270	320	420	350	533	610
L2	130	150	160	200	230	290	310	350	480	-	-	-
B	89	98	108	127	152	178	191	229	280	343	406	483
D	60	70	89	98	120	140	152	191	241	298	362	432
C	32	39	43	50	60	80	80	110	160	160	225	275
* C1	40	50	50	65	80	104	125	125	175	175	-	-
WT. Kg	3	4	5	8	10	14	19	25	45	70	-	-

Dimensions indicative only, refer to as-built drawing.
* Reduced glass size option shown (C1), larger port available.
350NB~400NB refer todrawing.

DIMENSIONS (MM) FLANGED SIGHT GLASS 300LB

Size (mm)	15	20	25	40	50	65	80	100	150	200	250	300
Size (inch)	0.5	0.75	1	1.5	2	2.5	3	4	6	8	10	12
L	149	149	175	191	219	289	289	337	543	568	568	648
B	95	117	124	156	165	191	210	254	318	381	445	521
D	67	83	89	114	127	149	168	200	270	330	387	451
C	32	32	35	51	54	81	81	108	159	159	225	275
WT. Kg	5	5	9	12	17	32	32	68	122	159	-	-

Dimensions indicative only, refer to as-built drawing.
600LB available up to 300NB (12"), refer to drawing.
350NB~400NB refer todrawing.

SIGHT GLASS / FLOW INDICATOR - MODEL SLSG

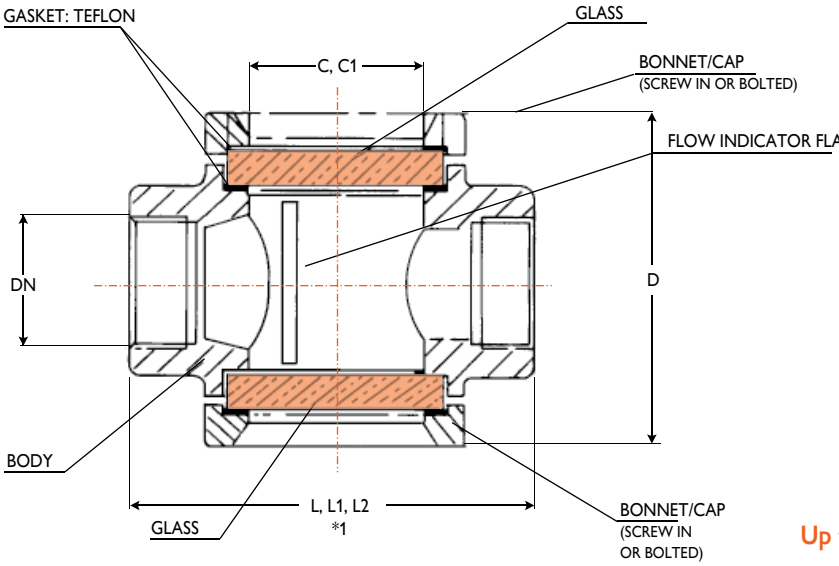
BILL OF MATERIALS (SCREWED AND FLANGED UNITS)

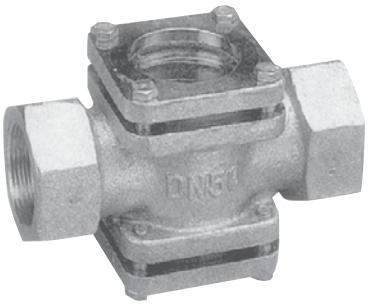
Components	Iron	CF8 SS *2	CF8M SS *2	Cast Steel
Body	FC20	CF8 or 304	CF8M or 316	Carbon Steel
Window Bonnet/Cap *3	FC20	CF8 or 304	CF8M or 316	Carbon Steel
Glass	Glass	Borosilicate	Borosilicate	Borosilicate
Bolting	Steel	S/S	S/S	Steel or B7
Sight Indicator Flapper *1	Steel	S/S	S/S	Steel
Gasket	Non Asbestos	Teflon	Teflon	Teflon or Spiral Wound

*1 Optional, can also be supplied with a nylon ball on request. *2 Can also be equivalent grade i.e. SCS13, SCS14. *3 In smaller sizes the cover is usually screwed.

Model SLSG
(32~50 NB)

Model SLSG
(15~25 NB)





SLSG-SLF3
Up to 50 NB 3000 PSI (20 Bar) available

DIMENSIONS SCREWED SIGHT GLASSES (MM)

Size (mm)	10/15	20	25	32	40	50
Size (inch)	**0.5**	**0.75**	**1**	**1.25**	**1.5**	**2**
L	112	112	112	145	145	168
L1	180	113	120	125	135	145
L2	120	120	138	150	150	180
D	70	90	90	120	120	140
C	24	30	30	42	42	55
C1	40	50	50	65	65	80
WT. Kg	1.5	2	2	4	4	6.5

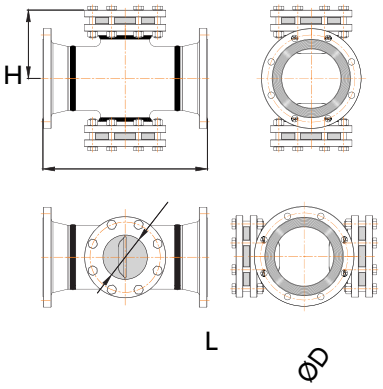
* 1 Available in short, regular & long pattern

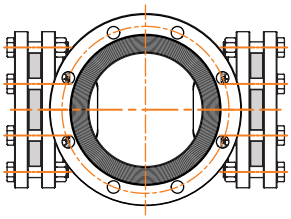
SEE-THROUGH FLANGED SIGHT GLASS
SLF01-02 ASME 150~600 CLASS

Design
Fully integral body with full penetration welded process connection flanges. Certified borosilicate tempered glass type 3.3 as per ISO 3585.

Process Connections
ASME 150 to 600 class flanged ends, raised face, serrated finish. Also, available in AS 2129 Table D to H, AS 4087 and ISO 7005-1 PN 10 to 110.

Overview
Double sided high pressure tempered borosilicate sight glass. High strength, chemical durability, thermal resistance, 90% light transmission, outstanding chemical durability to acid and alkali, and environmentally friendly. Flow indicator is optional





DIMENSIONS & WEIGHT 150 CLASS MM & KG

Process Connection*		L mm	H mm	D mm (inch)	Weight kg
50mm	2”	261	114	50.8 (2”)	18
80mm	3”	318	141	76.1 (3”)	34
100mm	4”	369	164	101.6 (4”)	49
150mm	6”	470	205	152.4 (6”)	81
200mm	8”	566	259	203.2 (8”)	141
250mm	10”	641	284	203.2 (8”)	174
300mm	12”	743	305	203.2 (8”)	223

DIMENSIONS & WEIGHT 300 CLASS MM & KG

Process Connection*		L mm	H mm	D mm (inch)	Weight kg
50mm	2”	274	120	50.8 (2”)	24
80mm	3”	337	158	76.1 (3”)	47
100mm	4”	388	202	101.6 (4”)	77
150mm	6”	489	248	152.4 (6”)	132
200mm	8”	585	287	203.2 (8”)	219
250mm	10”	673	312	203.2 (8”)	264
300mm	12”	774	348	203.2 (8”)	326

DIMENSIONS & WEIGHT 600 CLASS MM & KG

Process Connection*		L mm	H mm	D mm (inch)	Weight kg
50mm	2”	293	132	50.8 (2”)	28
80mm	3”	356	183	76.1 (3”)	54
100mm	4”	432	218	101.6 (4”)	113
150mm	6”	527	243	101.6 (4”)	161
200mm	8”	642	269	101.6 (4”)	218
250mm	10”	756	297	101.6 (4”)	306
300mm	12”	838	432	101.6 (4”)	406

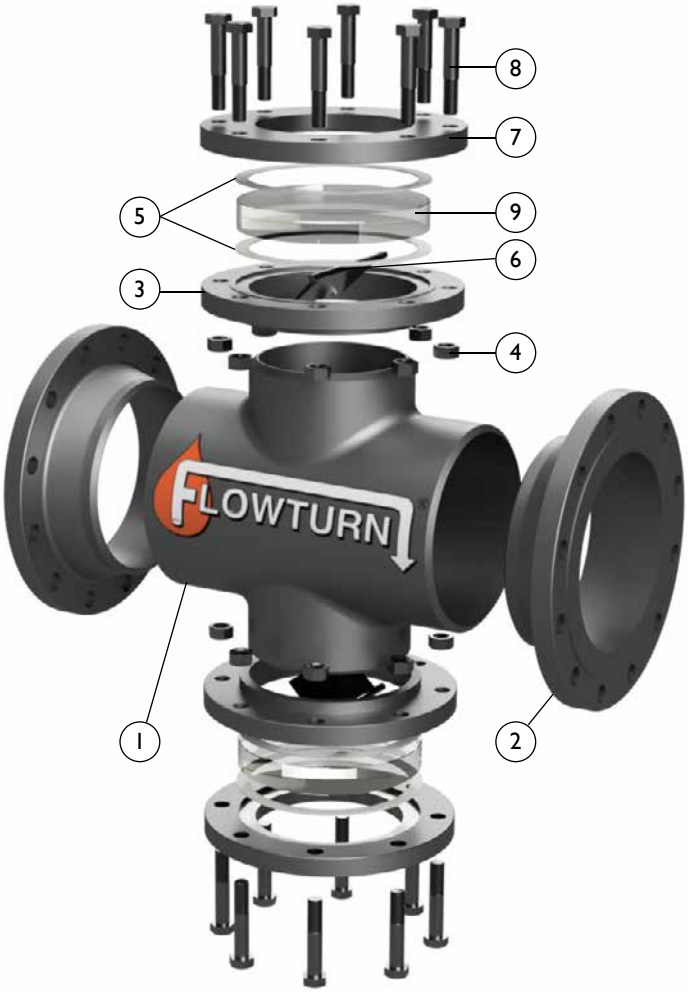
* Pressure-temperature ratings applicable up to 200°C
Pleas specify if special operating and environmental conditions

For 3D Video Click Here

SLF01-02 ASME 150~600 CLASS

BILL OF MATERIALS

No.	Description	Carbon Steel	Stainless Steel
1	Body (Seamless Cross)	ASTM A234 WPB	ASTM A430 WP316-S
2	Process Flange	ASTM A105N	ASTM A182 F316
3	Slip-on Flange	ASTM A105N	ASTM A182 F316
4	Nuts	A194 2H	A194 B8M Class 2
5	Glass Gasket	PTFE/TFM/GRAPHITE	PTFE/TFM/GRAPHITE
6	Flow indicator (Optional)	ASTM A276 Gr.316	ASTM A276 Gr.316
7	Adaptor Flange	ASTM A105N	ASTM A182 F316
8	Bolts	A193 B7	A193 B8M Class 2
9	Sight Glass	Tempered Borosilicate	Tempered Borosilicate



Manufactured in the USA, tempered borosilicate glass, type 3.3 per ISO 3585, has outstanding physical and chemical properties - low thermal expansion, high thermal resistance, excellent light transmission and impressive chemical durability. It is also a low-density glass that is 12% lighter than soda lime glass. Tempered glass demonstrates much higher material strength. When broken, it forms into finer pieces rather than sharp shards. Tempered glass can also withstand temperature fluctuations..

GLASS PROPERTIES

OPTICAL PROPERTIES	VALUE
Refractive index n_d [λ=587.6 nm]	1.4722
Dispersion	71.9 x 10^{-4}
THERMAL PROPERTIES	
Coefficient of thermal expansion α [20-300°C]	3.25 x 10^{-6} K^{-1}
Specific Heat Capacity Cp [20-100°C]	0.83 kJ/kgK
Thermal Conductivity [90 °C]	1.2 W/mK
Softening Point [107.6 dPas]	820°C
Annealing Point [1013 dPas]	560°C
Strain Point [1014.5 dPas]	518°C
CHEMICAL DURABILITY	
Acid Resistance [ISO 1776]	1
Alkali Resistance [ISO 695]	A2
Hydrolytic Class [ISO 719] / [ISO 720]	HGB 1 / HGA 1
MECHANICAL PROPERTIES	
Density	2.23 g/cm^3
Young's Modulus [E]	64 GPa
Poisson's Ratio	0.2
Shear Modulus	27 GPa
Vickers Hardness [0.2/15]	568
Knoop Hardness [0.1/20]	480
Permissible Compressive Strength	100 N/mm^2

SLF01-02 ASME 150~600 CLASS

CHEMICAL RESISTANCE

Tempered borosilicate glass is resistant to almost any chemical attack. It is highly resistant to acidic and alkali solutions. Known chemicals that can cause corrosion on its surface is hydrofluoric acid, concentrated phosphoric acid and strong caustic solutions at elevated temperatures.

PERMISSIBLE OPERATING TEMPERATURE

Tempered borosilicate glass can be operated safely at temperatures of 230°C, provided there is no sudden temperature shock. If PTFE bonnet gasket is used, maximum temperature is 200°C. Even though there is no exact rule applicable to all operating conditions, a maximum of 120°C temperature difference across the glass walls should be avoided.

CHEMICAL COMPATIBILITY - BOROSILICATE

CHEMICAL	RESISTANCE
1,4 Dioxane & Tetrahydrofuran	E
2-Ethoxyethyl Acetate	E
Acetic Acid, 25%	E
Acetic Acid, Glacial	E
Acetone	E
Ammonium Hydroxide, 25%	E
Amyl & Propyl Acetate	E
Amyl Alcohol, Butanol	E
Arsenic Acid	E
Benzyl Alcohol	E
Benzyl Benzoate	E
Boric Acid, 10%	E
Butyl Acetate	E
Carbon Tetrachloride	E
Chloroform	E
Chromic Acid, 20%	E
Dimethyl Sulfoxide	E
Ethanol, 70%	E
Ethanol, 98%	E
Ethyl Acetate	E

CHEMICAL	RESISTANCE
Ethyl Ether	E
Ethylene Glycol	E
Formic Acid, 25%	E
Formic Acid, 85%	E
Glycerol	E
Hexane, Xylene	E
Hydrochloric Acid, 25%	E
Hydrochloric Acid, Concentrated	E
Hydrofluoric Acid, 35% NR	NR
Isopropanol, n-Propanol	E
Isopropyl Ether	E
Isopropyl Myristate	E
Isopropyl acetone	E
Kerosene, Gasoline	E
Methanol, 98%	E
Methyl Acetate	E
2-Methoxyethyl Acetate	E
Methyl Chloride	E
Methyl Ethyl Ketone	E
Methyl Isobutyl Ketone	E

CHEMICAL	RESISTANCE
Freon	E
Nitric Acid, 25%	E
Nitric Acid, 50%	E
Nitric Acid, Concentrated	E
Phosphoric Acid 85%	NR
Phosphoric Acid, 25%	F
Potassium Hydroxide	E
Propylene Glycol	E
Propylene Glycol Acetate	E
Sodium Hydroxide	E
Sodium Hydroxide	E
Sulphuric Acid, 25%	E
Sulphuric Acid, 95%	E
Sulphuric Acid, concentrated	E
Tetralin, Decalin	E
Toluene, Benzene	E
Trichloroacetic Acid, 10%	E
Trichloroethylene	E
Tricresyl Phosphate	E

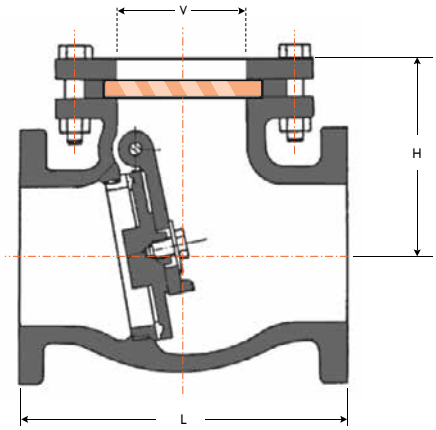
E – Excellent, F – Fair, NR – Non-Resistant
This table is just a guide

COMBINATION SIGHT GLASS/ CHECK VALVE MODEL SG187L FLANGED 150~600LB

Design
Bolted Bonnet, Full Bore metal to metal seating
For Horizontal or Vertical (upward flow) Lines
Swing Type, API 6D or BS 1868
Renewable Seat Ring

Flanging
ASME 150 to 600 class flanged ends, raised face, serrated finish. Also available in AS 2129 Table D to H, AS 4087 and ISO 7005-1 PN 10 to 35.

Overview
Single sided sight glass combination swing check (flapper serves as flow indicator as well as check valve)



Features
Fully integral body
Patented shatter resistant carbonate sheet (30 times the impact strength of normal acrylic). Borosilicate may be used in some situations.

BILL OF MATERIAL

Description		Carbon Steel	Stainless
Body		A216 WCB	A351 Gr. CF8, CF8M
Cover		A216 WCB	A351 Gr. CF8, CF8M
Disc		WCB - CR13 SS	A351 Gr. CF8, CF8M
Hinge		CR13 SS	A351 Gr. CF8, CF8M
Hinge Pin		CR13 SS	A182 Gr. F304, F316
Plug		A105	A193 Gr. B8, B8M
Cover Bolt		A193 B7	A193 Gr. B8
Cover Nut		A194 2H	A194 Gr. 8F
Disc Nut		A194 2H	A194 Gr. 8, 8M
Washer		Steel	A276 Type 304, 316
Bonnet Gasket		Spiral 316 + Gr. 7	Teflon or Spiral SS + Gr. 7
Seat (Integral)		A105 + Stellite	A351 Gr. CF8, CF8M
Glass		MR5 Carbonate Sheet	MR5 Carbonate Sheet
Standards	Face to Face / End to End		ANSI B16.10
	Flange Dimensions		ANSI B16.5
	Basic Design		ANSI B16.34
	Testing & Inspection		API 598

Suitable for water, oil, gas etc up to 215°C or (300°C only with borosilicate or mica glass). Pressure limitations apply as temperature increases, consult us if over 50°C.

DIMENSIONS 150LB — MM & KG

Size (mm)	25	40	50	65	80	100	125	150	200	250	300*2
Size (in)	**1”**	**1.5”**	**2”**	**2.5”**	**3”**	**4”**	**5”**	**6”**	**8”**	**10”**	**12”**
L. Face to Face RF	127	165.1	203.2	215.9	241.3	292.1	330	355.6	495.3	622.3	698.5
H. Valve Height	76.2	76.2	101.6	127	127	152.4	170	228.6	254	304.8	355.6
Weight (Kg)	22	33	50.6	70.4	101.2	154		288.2	506	528	1100
V. Viewing Diameter*1	25	45	50	65	80	100	100	180	125	130	140

*1 Larger diameter on request
*2 300NB Class 150 is not full ANSI CWP rated, see adjacent table.

Mechanically pre-stressed fused metal ring with encapsulated borosilicate glass insert option up to 600 class.

DIMENSIONS 300LB — MM & KG

Size (mm)	25	40	50	65	80	100	150*	200*
Size (in)	**1”**	**1.5”**	**2”**	**2.5”**	**3”**	**4”**	**6”**	**8”**
L. Face to Face RF	-	241.3	266.7	292.1	317.5	355.6	444.5	533.4
H. Valve Height	-	127	152.4	152.4	177.8	177.8	228.6	279.4
Weight (Kg)	-	57.2	70.4	112.2	160.6	242	466.4	770
V. Viewing Diameter	25	40	50	55	65	80	100	100

*150NB & 200NB Class 300 are not full ANSI rated CWP see adjacent CWP table.

DIMENSIONS 600LB — MM & KG

Size (mm)	15	20	25	40	50
Size (in)	**0.5”**	**0.75”**	**1”**	**1.5”**	**2”**
L. Face to Face RF	165	190	216	241.0	292.0
H. Valve Height	58	68	78	84.0	120.0
Weight (Kg)	3	4.6	7.0	13.0	33.0
V. Viewing Diameter	25	25	25	25	25

In 15NB to 20NB a male threaded integral sight glass bonnet inset is used - refer to drawing.

NOTICE ON TEMPERATURE AND APPLICATION OF GLASS INSERT

Sight Indicators fitted with standard MR5 glass should not be used on temperatures over 230°C. As with all materials, the pressure rating of these sight indicators will be reduced as the temperature increases above 40°C, it is essential you consult us if your application is for high temperature and or pressure service. It is essential you ensure the ANSI rating you order is suitable for the maximum pressure of your service. Note Class 150 300NB and 300 Class 150NB & 200NB are not full ANSI rated see CWP table above. For temperatures to 300°C we would offer Borosilicate or mica glass. We also supply borosilicate glass if application is for chemical service such as ketones, halogenated hydrocarbons, esters, aromatic hydrocarbons, aliphatic hydrocarbons, acids, amines, high concentration of alkalis & any other fluids not compatible with carbonated perspex. Please state your application.

COLD WORKING PRESSURE

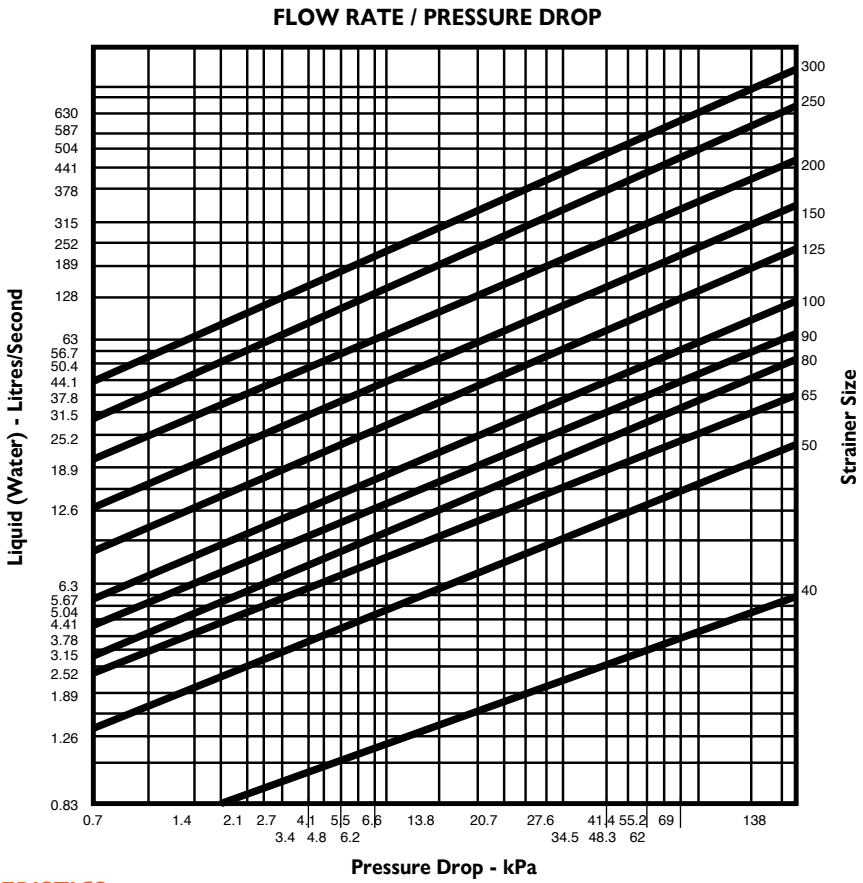
(note at higher temperature, pressure rating decreases)
150LB up to 250NB:- 285 PSI
300LB up to 125NB:- 740 PSI
150LB 250NB to 300NB:- 250 PSI
300LB 150NB to 200NB:- 500 PSI (Table H)
600LB 15NB to 50NB:- 1440 PSI

If a higher pressure is required you must specify in writing on your inquiry and your order.

The catalogue is general in it’s nature and design and can vary at any time. This catalogue is to be used as a guide only.

Y-TYPE STRAINER SLCI-8111 SERIES

CAST IRON, FLANGED TO SUIT 125LB ANSI B16.5 & AS/BS TABLE D, E, PN10/16



FLOW CHARACTERISTICS

Pressure drop in this chart has been calculated using a strainer with 1.6mm hole element on clean water. When the strainer element is partially blocked the pressure drop incurred will be inversely proportional to the area remaining clean

DIMENSIONS (MM)

ANSI - 125 FLANGED SLCI-8111 - 125

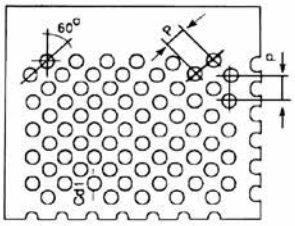
Inch		1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"
Size	mm	40	50	65	80	100	125	150	200	250	300	350	400	450	500
D		127	152	178	190	229	254	279	343	406	483	535	597	635	700
L1		192	241	267	290	378	442	534	572	660	770	949	940	-	-
L2		190	250	250	250	350	390	470	543	640	762	780	-	-	-
H		150	160	200	210	260	310	380	450	530	690	840	-	-	-
Weight (Kg)		19	19	18	20	40	60	80	120	186	274	370	556	-	-

For PN10/14/16/21 and AS Table D, E, F refer to drawing.

AVAILABLE SCREEN TYPES (SS MESH)

*Nominal Size	Perforation "CD1"	Pitch of Holes (P)	Screen Thickness	Approx Mesh Size	% Open Area	Micron Count
25mm to 50/65mm	1.0 to 1.15*	2.0	0.4	# 20	36 %	-
50/80mm to 150mm	2.0 to 3.18*	3.5	0.5	# 5	48 %	-
200mm to 250mm	3.0 to 3.18*	4.5	0.6	# 6	42 %	-

* Only a guide, will vary all sizes on request.



PRESSURE/TEMPERATURE

As per maximum pressure/temperature ratings indicated in relevant AS/BS/EN/ISO/ASME flange standard. Maximum Temp 220°C (pressure limitations apply at maximum temperature). All strainers are tested to 1.5 times the maximum working pressure. If for high temperature application you must advise so we can use high temperature gasket.

Y-TYPE STRAINER SLCI-8111 SERIES

CAST IRON, FLANGED TO SUIT 125LB ANSI B16.5 & AS/BS TABLE D, E, PN10/PN16

Flanged to Suit 125LB ANSI B16.5, AS 2129 Table D, E / AS 4087 / ISO 7005-1 / AS 4331.1 PN10~21. Y-Type cast strainers are manufactured with Heavy Duty Spot welded stainless steel punched screens. Suitable for water, oil & numerous fluid applications. Flowturn strainers have 10 times the open area of the nominal pipe bore. Multiply this by the 'open area' of the screen size to calculate total open area. On average, this gives Flowturn strainers 3 to 4 times the pipe bore open area when using standard hole perforation sizes.

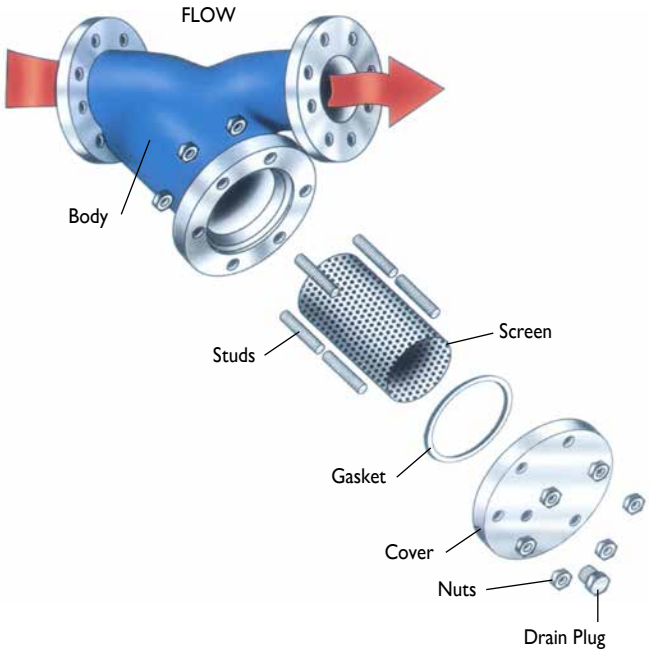
Design ASTM F1200-88, BSEN 1074, ANSI B16.1, EN 12266-1.

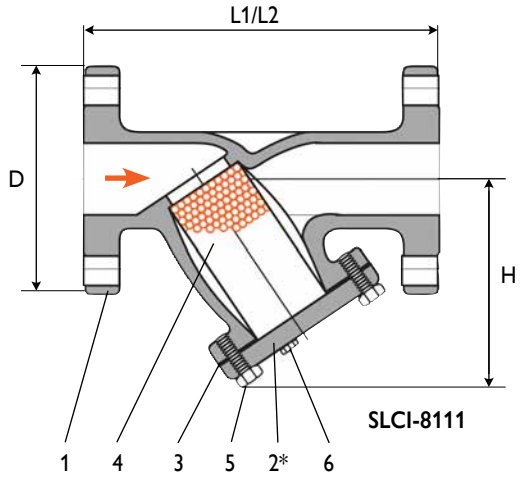
Service Recommendations These strainers are designed for long service. Installation of a strainer before any automatic equipment will ensure trouble free service and avoid the costly repairs or replacements so often caused by the introduction of foreign matter in pipe lines.

Features All sizes feature a bolted cover, as illustrated. Covers normally furnished with blowoff plug.

Screens Heavy gauge perforated stainless steel normally furnished with spot welded seams.

Flanging Available in ANSI B16.5, AS 2129 Table D/E, AS 4087/AS 4331.1/EN 1092-2/ISO 7005-1 PN10~16 (PN25 and 250LB also available in ductile iron & carbon steel).





FLOW RATE

	Flow in L/sec at pressure drop of		
Nom. Bore	**3.5kPa**	**14kPa**	**34kPa**
50	4.5	7.95	12.25
65	6.5	12.5	19.70
80	9.5	19.32	30
100	14.75	29.5	47.75
125	23.9	48.5	83
150	33.75	67	106

MATERIALS LIST

No	Parts Name	Cast Steel
1	Body	Cast Iron
2	Cover	Cast Iron
3	Gasket	NBR/EPDM/PTFE
4	Screen	SS304/316
5	Bolting	Steel
6	Drain Plug	Steel

Y-TYPE STRAINER SLCI-8111-25 SERIES

DUCTILE IRON/STEEL PN25 FLANGED & RATED

Y-Type cast strainers are manufactured with Heavy Duty spot welded stainless steel punched screens. Suitable for water, oil & numerous fluid applications. Flowturn strainers have 10 times the open area of the nominal pipe bore. Multiply this by the 'open area' of the screen size to calculate total open area. On average, this gives Flowturn strainers 3 to 4 times the pipe bore open area when using standard hole perforation sizes.

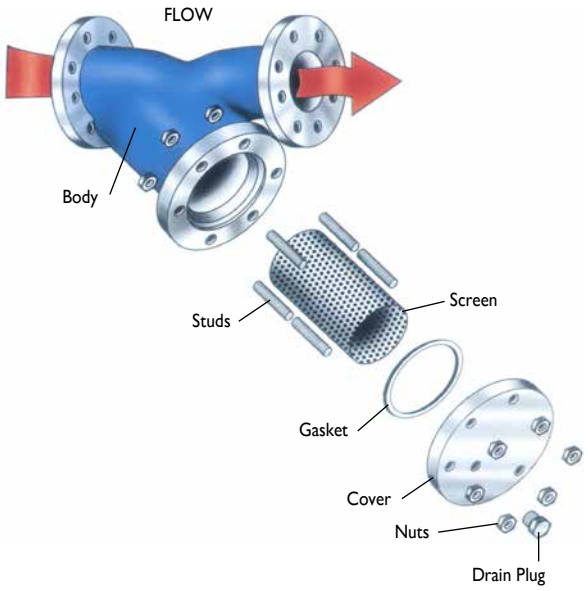
Service Recommendations These strainers are designed for long service. Installation of a strainer before any automatic equipment will ensure trouble free service and avoid the costly repairs or replacements so often caused by the introduction of foreign matter in pipe lines.

Features All sizes feature a bolted cover, as illustrated. Covers normally furnished with blowoff plug. Epoxy coated internal & external.

Screens Heavy gauge perforated stainless steel normally furnished with spot welded seams.

Flanging Available in: PN25 - AS 4331.1/EN 1092-2/ISO 7005-1, PN21 - AS 4087, PN35* - AS 4087 (PN25 rated, PN35 drilled), Table F - AS 2129.

*For true PN35 rating, refer 300 class WCB Flowturn strainer which can be supplied Flanged to suit PN35

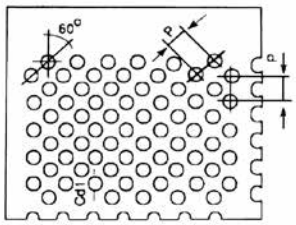


SLCI-8111-25

Pressure Drop
When the strainer element is partially blocked the pressure drop incurred will be inversely proportional to the area remaining clean.

AVAILABLE SCREEN TYPES (SS MESH)

*Nominal Size	Perforation "CD1"	Pitch of Holes (P)	Screen Thickness	Approx Mesh Size	% Open Area	Micron Count
25mm to 50/65mm	1.0 to 1.15*	2.0	0.4	# 20	36 %	-
50/80mm to 150mm	2.0 to 3.18*	3.5	0.5	# 5	48 %	-
200mm to 250mm	3.0 to 3.18*	4.5	0.6	# 6	42 %	-



* Only a guide, will vary all sizes on request.

PRESSURE/TEMPERATURE

PN25 rated, maximum cold working pressure 2.5 mPa. Maximum Temp 220°C (pressure limitations apply at maximum temperature). All strainers are tested to 1.5 times the maximum working pressure. If for higher temperature application you must advise so we can use high temperature gasket.

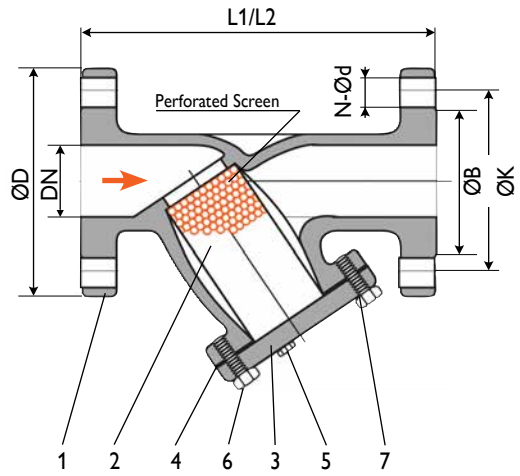
Y-TYPE STRAINER INTEGRAL DUCTILE IRON/STEEL MODEL SLCI-8111-25

DIMENSIONS (MM) DUCTILE IRON (50~300NB)

Size	L	ØB	ØD	ØK	c	n-Ød
50	210	99	165	125	19	4-Ø19
65	225	118	185	145	19	8-Ø19
80	240	132	200	160	19	8-Ø23
100	280	156	235	190	19	8-Ø23
125	345	184	270	220	19	8-Ø28
150	395	211	300	250	20	8-Ø28
200	500	274	360	310	22	12-Ø28
250	542	330	425	370	24.5	12-Ø31
300	650	389	485	430	27.5	16-Ø31

BILL OF MATERIALS (DUCTILE IRON)

No.	Name of part	Material
1	Body	Ductile Iron (EN GJS 500-7)
2	Screen	Stainless Steel (AISI 304)
3	Bonnet	Ductile Iron (EN GJS 500-7)
4	O-Ring	NBR/PTFE
5	Plug	Steel
6	Bolt	Steel
7	Washer	Steel



DIMENSIONS (MM) CARBON STEEL (350~600NB)

Size	L	ØB	ØD	ØK	c	n-Ød
350	900	448	555	490	30	16-Ø34
400	1000	503	620	550	32	16-Ø37
450	1100	548	670	600	34.5	20-Ø37
500	1250	609	730	660	36.5	20-Ø37
600	1450	720	845	770	42	20-Ø40

BILL OF MATERIALS (CARBON STEEL)

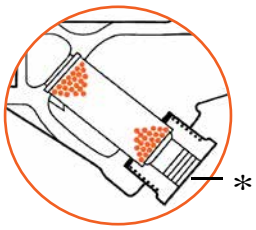
No	Name of part	Material
1	Body	Carbon Steel (C22)
2	Screen	Stainless Steel (AISI 304)
3	Bonnet	Carbon Steel (C22)
4	O-Ring	Rubber (NBR)
5	Plug	Carbon Steel (Galvanised)
6	Bolt	Carbon Steel (Galvanised)
7	Washer	Carbon Steel (Galvanised)

Y-TYPE STRAINER INTEGRAL CAST STEEL MODEL SL-8111 - FLANGED ANSI 150 TO 2500 CLASS

Overview Y-Type cast strainers in WCB, CF8, CF8M, A20, Duplex, Super Duplex, monel, etc.. Heavy Duty spot welded S/S screens. Suitable for water, oil & numerous fluid applications.

Design Flowturn strainers have up to 9 times the open area of the nominal pipe bore. Multiply this by the "open area" of the screen size to calculate total "open area". On average, this gives Flowturn strainers at least 3 times the pipe bore open area.

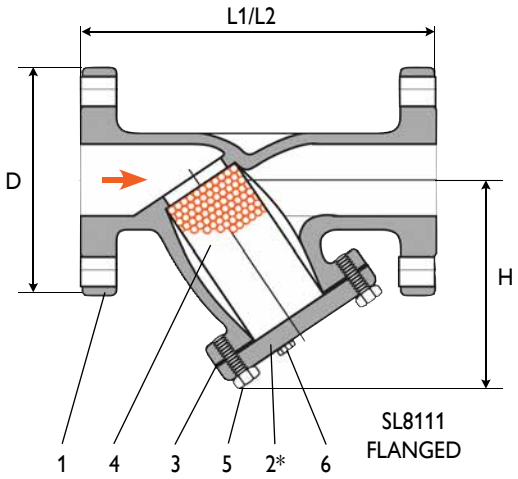
Also available with sight glass window.

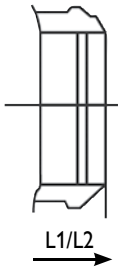


* Up to 50NB
Bonnet is screw in
(flanged on request)

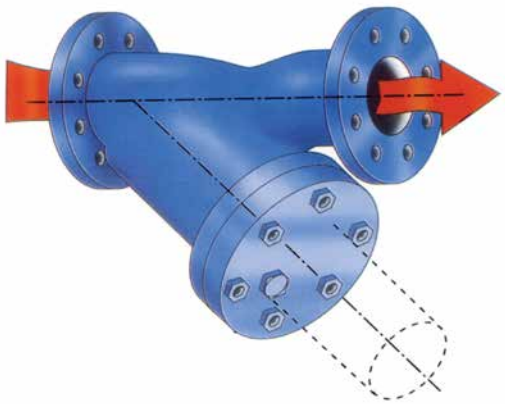
No	Parts Name	Cast Steel	304 SS	316 SS
1	Body	A216-WCB	A351-CF8	A351-CF8M
2*	Cover	A216-WCB	A351-CF8	AISI-CF8M
3	Gasket	Spiral / PTFE	Spiral / PTFE	Spiral / PTFE
4	Screen	AISI 304	AISI 304	AISI 316/304
5	Bolting	B7 / 2H	B8	B8
6	Drain Plug	Steel	AISI 304	AISI 316

* 50NB & smaller are screw in bonnet but are also available in bolted bonnet





SL8111-BW
BUTTWELD



Y-TYPE STRAINER INTEGRAL CAST STEEL MODEL SL-8111

DIMENSIONS (MM)

Model	Size	inch	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"
		mm	15	20	25	40	50	65	80	100	125	150	200	250	300	350
SL-Y8111-ANSI-150	D		89	98.5	108	127.1	153	177.9	191	229	254	280	343	407	483	534
	L1		152	147	127	200	220	270	241	292	365	406	540	660	772	950
	L2		120	130	160	165	203	290	290	350	356	440	495	622	698	-
	H		65	76	86	121	124	191	197	232	279	340	371	438	533	-
	Weight (Kg)		4	5	7	8	13	20	27	43	67	77	117	184	273	-
SL-Y8111-3-ANSI-300	D		95.3	118	124	155.6	165	190.6	210	254	280	318	381	445	520	584
	L1		160	160	198	240	267	290	318	350	400	480	635	730	711	950
	L2		130	-	150	200	230	300	310	356	470	444	600	760	850	-
	H		-	-	92	111	156	190	229	279	391	394	412	489	610	-
	Weight (Kg)		-	-	11	12	21	28	39	73	83	116	171	271	578	-
SL-Y8111-6-ANSI-600	D		95	118	124	155.6	165	190.6	210	273	330	356	419	508	559	603
	L1		165	165	190	230	292	305	343	432	565	559	806	956	1067	-
	L2		-	-	216	141	318	330	356	508	508	648	762	957	-	-
	H		-	-	-	-	156	184	203	238	314	438	470	549	679	-
	Weight (Kg)		-	-	-	-	24	35	44	93	147	182	371	533	642	-
SL-Y8111-9-ANSI-900	D		120.7	130	149	177.9	216	244.5	241	292	349	381	470	546	610	641
	L1		99.22	108	127	213	416	-	514	591	-	705	880	965	-	-
	L2		-	-	-	-	369	-	-	-	-	-	-	-	-	-
	H		76	92	133	178	266	-	323	381	-	484	575	672	-	-
	Weight (Kg)		-	-	-	-	-	-	-	-	-	-	-	-	-	-
SL-Y8111-15-ANSI-1500	D		120.7	130	149	177.9	216	244.5	267	311	375	394	483	584	673	749
	L1		99	108	127	213	416	-	568	645	-	819	-	-	-	-
	L2		-	-	-	-	-	-	470	-	-	-	-	-	-	-
	H		76.2	92	133	178	266	-	367	415	-	494	-	-	-	-
	Weight (Kg)		-	-	-	-	-	-	-	-	-	-	-	-	-	-

Larger sizes and 2500 class refer to drawing. Dimensions are provided as a guide and can vary any time without notice.

FLOW CHARACTERISTICS

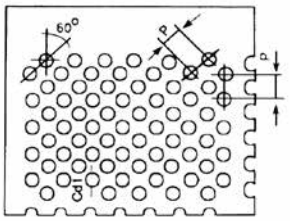
Pressure drop in this chart has been calculated using a strainer with 1.6mm hole element on clean water

When the strainer element is partially blocked the pressure drop incurred will be inversely proportional to the area remaining clean

Nom. Bore	Flow in L/sec at pressure drop of		
	3.5kPa	14kPa	34kPa
50	4.5	7.95	12.25
65	6.5	12.5	19.7
80	9.5	19.32	30
100	14.75	29.5	47.75
125	23.9	48.5	83
150	33.75	67	106

PRESSURE/TEMPERATURE

Model	Max Cold Working Pressure W.O.G.	Max Working Pressure Steam
SL-Y8111-150LB Flanged	1965 KPA (285 PSI) WOG	1034 KPA (150 PSI) @ 350°C (*2)
SL-Y8111-300LB Flanged	4964 KPA (720 PSI) WOG	2068 KPA (300 PSI) @ 450°C (*2)
600 Class to 1500 Class please consult us.		



All strainers are tested to 1.5 times the maximum working pressure.
(*2) If for steam/high temp application you must advise so we can use high temp gasket.
Pressure limitations apply at maximum temperature.

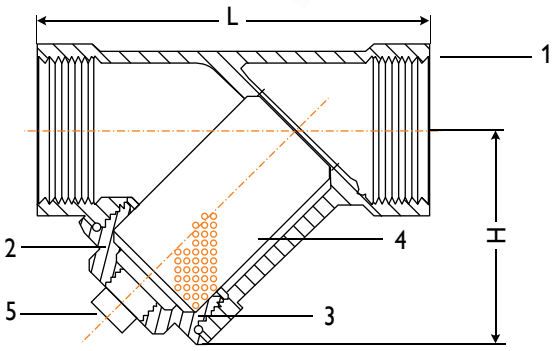
SCREEN SPECIFICATIONS (ALL 304/316 SCREEN)

Nominal Size	Perforation "CD1"	Pitch Of Holes (P)	Screen Thickness	Approx Mesh Size	% Open Area	Micron Count
25mm to 50mm	0.8 to 1.5mm	2mm	0.4mm	#20	36%	841
65mm to 150mm	1.0 to 3.0mm	3.5mm	0.5mm	#5	48%	2000-3000
200mm to 250mm	3 to 3.2mm	4.5mm	0.6mm	#6	42%	3360

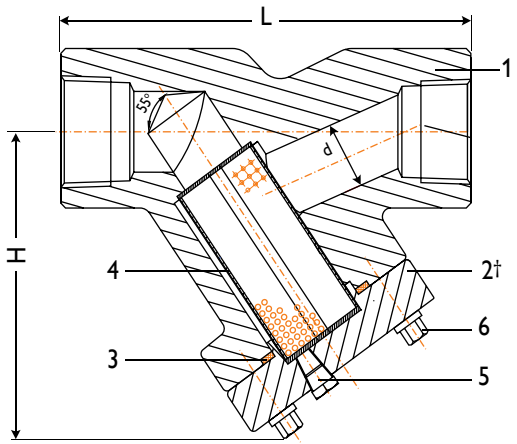
We can also supply special mesh or bags as low as 37 microns for very low pressure/flow applications

Y-TYPE STRAINER FORGED
MODEL SLY8211/8223 - SCREWED & WELD ENDS

Overview Suitable for water, oil & numerous fluid applications. Flowturn strainers have up to 9 times the open area of the nominal pipe bore. Multiply this by the "open area" of the screen size to calculate total "open area". On average, this gives Flowturn strainers 2-1/2 to 5 times the pipe bore open area. Strainers are furnished with a machined seat which allows the screen to be self aligning and assures a perfect fit. All sizes come complete with a blow-off connection* and an easily removable stainless steel screen.



SL-Y8211 150, 600, 800, 1000 PSI WOG



SL-8223 ANSI CLASS 600, 800, 1500 & 2500

MATERIALS LIST

No	Parts Name	Forged Steel	304 SS	316 SS
1	**Body**	A105N	A182 F304	A182 F316
2	**Cover†**	A105N	A182 F304	A182 F316
3	**Gasket**	SPIRAL/PTFE	SPIRAL/PTFE	SPIRAL/PTFE
4	**Screen**	AISI 316	AISI 304	AISI 316
5	**Drain Plug**	A105	AISI 304	AISI 316
6*	**Bolting**	A193-B7 / 2H	A194 B8	A194 B8M

* 800 class & over are bolted bonnet.
Indicative only, refer to as-built drawing.

Y-TYPE STEEL STRAINER
MODEL SLY8211/ 8223

DIMENSIONS (MM)
SL-Y8223 - 600/800 CLASS

Size		L (mm)	H (mm)	Blow-Off* N.P.T. (inch)	Weight (Kg)
mm	inch				
15	1/2	74	60	3/8	0.45
20	3/4	95	73	3/8	0.68
25	1	115	94	1/2	1.02
32	1-1/4	125	98	1/2	1.82
40	1-1/2	141	122	3/4	2.73
50	2	176	154	3/4	4.66
65	2-1/2	-	-	1-1/4	5.91
80	3	-	-	1-1/4	8.18

Indicative only, refer to as-built drawing.

DIMENSIONS (MM)
SL-Y8223-1500 CLASS

Size		L (mm)	H (mm)	Blow-Off N.P.T. (Inch)	Weight (Kg)
mm	inch				
15	1/2	99.22	76.2	1/4	2.73
20	3/4	107.95	92.08	1/4	2.73
25	1	127	104.78	1/4	2.73
32	1-1/4	212	178	3/4	7.73
40	1-1/2	212	177.8	3/4	7.73
50	2	236.54	187.33	3/4	13.64

Indicative only, refer to as-built drawing.

PRESSURE/TEMPERATURE

Model	Max Cold Working Pressure W.O.G.	Max Working Pressure Steam
SL-Y8211-150 PSI	150 PSI WOG (CWP)	140 PSI @ 300°C (*1)
		130 PSI @ 200°C
SL-Y8211-600 PSI	600 PSI WOG (CWP)	440 PSI @ 300°C (*1)
		460 PSI @ 200°C
SL-Y821-800 PSI	800 PSI WOG (CWP)	460 PSI @ 300°C (*1)
		500 PSI @ 200°C
SL-Y821-1000 PSI	1000 PSI WOG (CWP)	465 PSI @ 300°C (*1)
		500 PSI @ 200°C
SL-Y8223-600 Class	1480 PSI WOG (CWP)	Refer ASME B16.34
SL-Y8223-800 Class	2020 PSI WOG (CWP)	Refer ASME B16.34
SL-Y8223-1500 Class	3700 PSI WOG (CWP)	Refer ASME B16.34
SL-Y8223-2500 Class	6000 PSI WOG (CWP)	Refer ASME B16.34

All strainers are tested to 1.5 times the maximum working pressure (pressure limitations apply at maximum temperature) (*1) If for the steam/high temperature application you must advise so we can use high temp gasket.

DIMENSIONS (MM)
SL-Y8211 - 150, 600, 800 & 1000 PSI

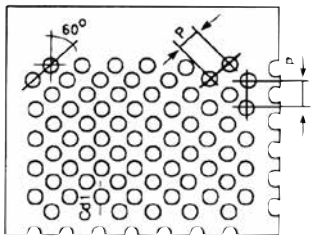
Size		600 to 1000 PSI	
mm	inch	L (mm)	H (mm)
8	1/4	65	51
10	3/8	65	51
15	1/2	65	51
20	3/4	80	60
25	1	85/108	50/105
32	1-1/4	99	55
40	1-1/2	111/149	59/142
50	2	140/179	73/188
65	2-1/2	185/174	91/155
80	3	206/496	110/180
100	4	238	163

Indicative only, refer to as-built drawing.

DIMENSIONS (MM)
SL-Y8223-2500 CLASS

Size		L (mm)	H (mm)	Blow-Off N.P.T. (Inch)	Weight (Kg)
mm	inch				
15	1/2	99	76	1/4	2.73
20	3/4	107	92	1/4	2.73

25NB ~ 50NB refer to as-built drawing.



SCREEN SPECIFICATIONS

Nominal Size	Perforation "CD1"	Pitch of Holes (P)	Screen Thickness	Approx. Mesh Size	% Open Area	Micron Count
25mm to 50mm	.8 mm	2.0 mm	0.4 mm	#20	36%	841
65mm to 80mm	1.14 mm	3.5 mm	0.5 mm	#5	48%	2000-3000

Examples only. We can also supply special mesh as low as 37 microns for very low pressure/flow applications.

GLOBE STRAINER INTEGRAL CAST STEEL MODEL SLS503-MIV

Tested to API Standard 598
Face-to-Face Dimensions to ANSI B16.10
RF Flanged ends to ANSI B16.5
Butt Welding ends to ANSI B16.25

STANDARD MATERIAL SPECIFICATIONS

Part Name	Materials
Body	ASTM A216 WCB/A351 CF8M
Gasket	S/S / Graphite
Bonnet	ASTM A216 WCB/A351 CF8M
Bonnet Bolt	ASTM A193 B7/A194 B8
Bonnet Nut	ASTM A194 2H/A194 Gr. 8

For horizontal or vertical installations in applications such as industrial, mining and mechanical services. Suitable for super-heated steam, H.T.H.W., steam, condensate & water.

Flowturn strainers have around 5 to 7 times the pipe bore open area. Multiply this by the 'open area' of the screen size to calculate the total open area.
Smaller sizes have a larger open area (see attached).
Integral cast body (not fabricated).

WORKING PRESSURE

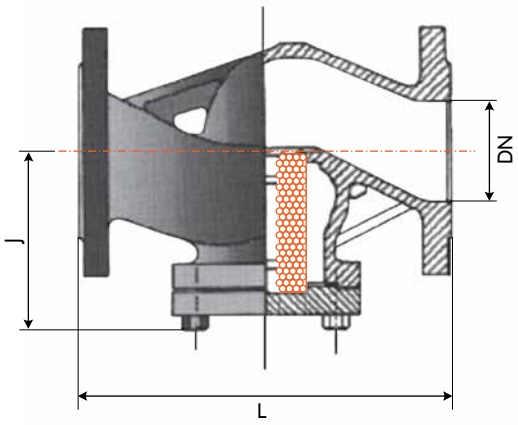
SLS503-150 150 Class (to Table-F)
280 PSI CWP (WOG)
170 PSI Saturated Steam (at 260°C)

SLS503-300 300 Class (to Table-J)
720 PSI CWP (WOG)
600 PSI Saturated Steam (at 260°C)
For superheated steam consult pressure/temp chart

SLS503-600 600 Class (to Table-R)
1440 PSI CWP (WOG) for high temperature consult chart
WC6 body supplied for high temperature applications
Maximum Temperature 850°F (450°C)

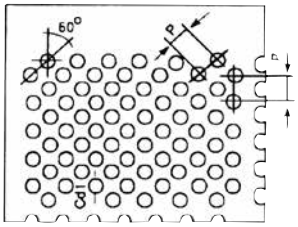
SLS503-900 900 Class
2220 PSI CWP (WOG) for high temperature consult chart
WC6 body supplied for high temperature applications
Maximum Temperature 850°F (450°C)

SLS503-1500 1500 Class
3700 PSI CWP (WOG) for high temperature consult chart
WC6 body supplied for high temperature applications
Maximum Temperature 850°F (450°C)

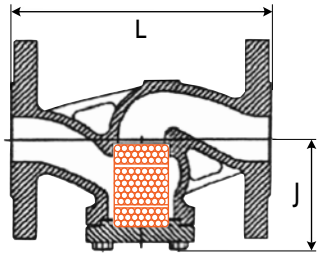


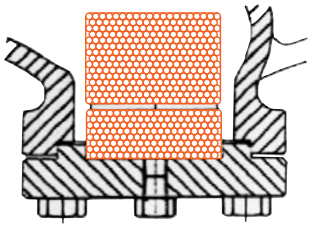
SCREEN SPECIFICATION (ALL 304 / 316 SS SCREEN)

Nominal Size	Perforation "CD1"	Pitch of Holes (P)	Screen Thickness	Approx Mesh Size	% Open Area	Micron Count
to 150mm	2.0 / 3.18	3.5	0.5	#5	48%	2000 - 3000
200 to 250mm	3.0 to 3.18	4.5	0.6	#6	42%	3360



GLOBE STRAINER INTEGRAL CAST STEEL MODEL SLS503-MIV

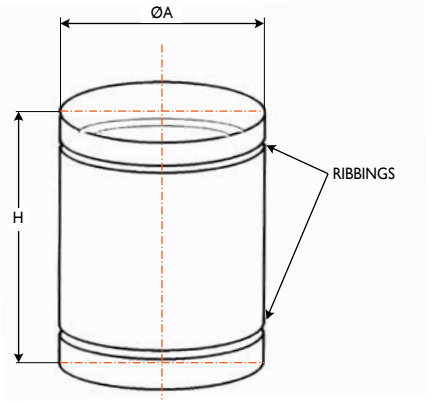


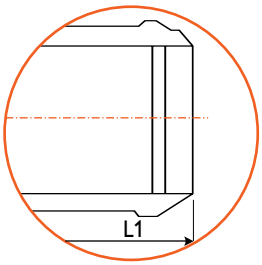


SCREEN DIMENSIONS MM (150 TO 600 CLASS)

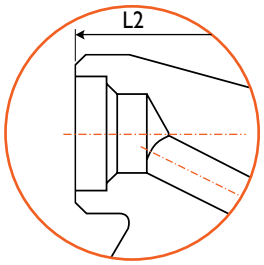
DN	15	20	25	32	40	50	65	80	100	125	150	200	250
ØA	25	25	30	35	45	56	71	87	106	131	155	210	260
H	56	58	65	65	68	85	127	130	145	192	202	260	280
Total Screen Surface area (M2)	4.4	4.6	6.1	7.2	9.5	15	28.3	35.5	47.9	79	98.3	171	229
Total Pipe* Surface area (M2)	0.19	0.34	0.56	0.95	1.3	2.2	3.1	4.8	8.2	12.9	18.6	32.3	50.3
Equivalent Bore Multiplyer	23	13.5	17.9	7.5	7.3	6.9	9.1	7.3	5.8	6.12	5.28	5.29	4.5

* Std Weight Pipe

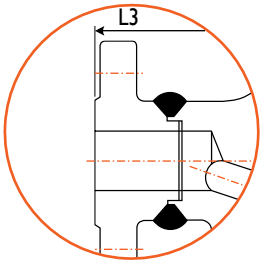




BUTTWELD



NPT or Socketweld ends
Class 800, 1500, 2500, 2690



Optional weld on Flanges (up to 50NB)
Class 800, 1500, 2500. Full penetration V-prep welds are pre-heated and normalised as well as dye penetrant tested.

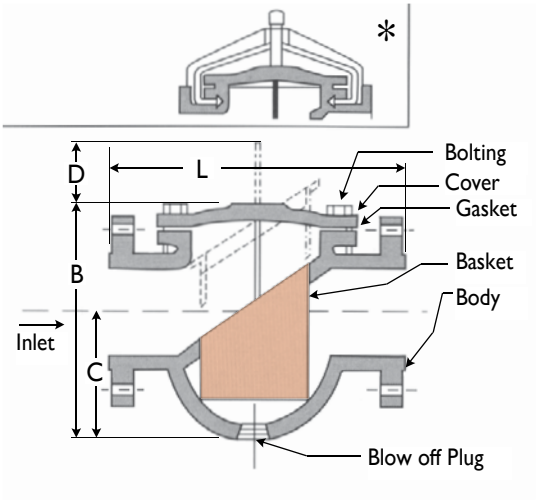
OVERALL DIMENSIONS (MM & INCHES) AND WEIGHT (KG)

Valve Size (NPS)		inch	3/4"	1	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"
		mm	20	25	40	50	65	80	100	125	150	200	250	300
CLASS 150 (BST E TO F)	L/L1 (RF/BW)	inch	4-5/8	5	6-1/2	8	8-1/2	9-1/2	11-1/2	14	16	19-1/2	24-1/2	27-1/2
		mm	117	127	165	203	216	241	292	356	406	495	622	698.5
	J	inch	3-1/3	3-1/3	6-1/2	7	8	8	8	13	14	15	18	18
		mm	85	85	165	178	200	200	200	330	356	381	457	457
	Weight (kg)	RF	3.2	4.4	8.5	22	31	37	58	103	111	179	240	-
CLASS 300 (BST F TO J)	L/L1 (RF/BW)	inch	7	8	9	10-1/2	11-1/2	12-1/2	14	15.75	17-1/2	22	24-1/2	28
		mm	178	203	229	267	292	318	356	400	444.5	559	622	711
	J	inch	2-3/4	3	3-7/8	6	7	9	9	14	14	16	19	22
		mm	70	76	98	152	178	229	229	356	356	406	482	559
	Weight (kg)	RF	4.5	5.9	10.2	28	47	54	76	150	162	270	-	-
CLASS 600 (BST J TO R)	L/L1 (RF/BW)	inch	7	8	9	11-1/2	13	14	17	-	22	26	31	33
		mm	178	203	229	292	330	356	432	-	559	660	787	838
	L2 (RTJ)	inch	7	8	9	11-5/8	13-1/8	14-1/8	17-1/8	-	22-1/8	26-1/8	31-1/8	33-1/8
		mm	178	203	229	295	333	359	435	-	562	664	791	841
	J	inch	2-3/4	3	3-7/8	6-3/8	7-5/8	9.5	9.5	-	14-1/3	15-3/4	-	-
		mm	70	76	98	168	193	241	241	-	353	400	-	-
	Weight (kg)	RF	6	10	17	51	62	85	143	-	340	520	-	-
CLASS 900	L-L1 (RF/BW)	inch	9	10	12	14-1/2	16-1/2	15	18	-	24	29	-	-
		mm	229	254	305	368	419	381	457	-	610	737		-
	J	inch	-	-	-	-	-	-	-	-	-	-	-	-
		mm	159	173	202	257	310	305	368	-	478	594	-	-
	Weight (kg)	RF	10	15	26	91	100	109	191	-	404	807	-	-
CLASS 1500	L-L1 (RF/BW)	inch	9	10	12	14-1/2	16-1/2	18-1/2	21-1/2	-	27-3/4	32-3/4	-	-
		mm	229	254	305	368	419	470	546	-	705	832	-	-
	J	inch	-	-	-	-	-	-	-	-	-	-	-	-
		mm	159	173	202	257	310	321	349	-	559	667	-	-
	Weight (kg)	RF	10	15	26	91	100	159	232	-	667	1221	-	-

BASKET STRAINER FV40-41-SF SERIES
INTEGRAL CAST 125LB/150 LB/PN10/PN14/PN21

Swing Bolted Bonnet Version

Bridge Closure



* Optional quick release lid (Bridge type shown)

SIZE 50NB to 500NB (2"-20")

Flanging To Suit

ANSI 125, 150
AS 2129 Table D, E, F
AS 4087 PN14, PN21
AS 4331.1/EN 1092-1/EN 1092-2/ ISO 7005-1 PN10~25

STANDARD PRODUCT MATERIAL COMBINATION ANSI CLASS 125/PN10/PN14

Body, Cover, Plug	ASTM A126 Class B Iron
Screens	SS304
Gasket	CNAF/PTFE/EPDM/NBR

STANDARD PRODUCT MATERIAL COMBINATION ANSI CLASS 150/PN21

Body, Cover, Plug	ASTM B62 - Bronze/A216 WCB
Screens	SS316
Gasket	CNAF/PTFE/NBR/EPDM

Body, Cover, Plug	ASTM A216 Grade WCB
Screens	SS304
Gasket	Non-asbestos (CNAF)

Body, Cover, Plug	ASTM A351 Gr. CF8M
Screens	SS316
Gasket	Non-asbestos (CNAF)

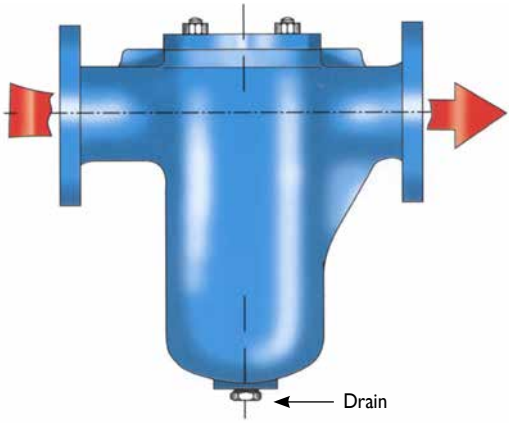
Class 300 model DKSL01 also available

DIMENSIONS (INCH)

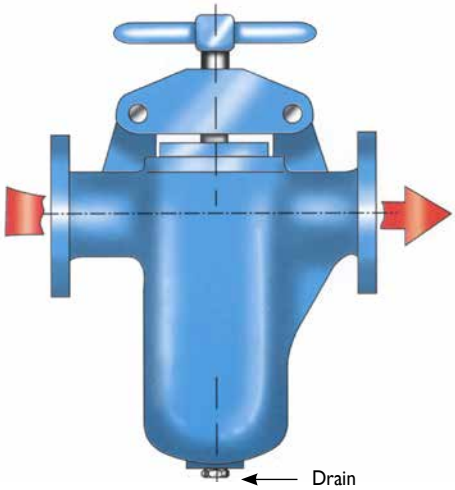
Size (mm)	Size (in)	L	B	C	Blow Off Plug	D Clearance for Bskt Removal	Weight (lb)	Weight (kg)
50	**2"**	8-1/8	8-3/8	5	1	5-3/8	34	15.42
65	**2-1/2"**	8-3/4	10	5-5/16	1	6-5/16	43	19.50
80	**3"**	9-7/8	11-1/4	6-3/4	1	8	60	27.21
100	**4"**	11-1/2	13-1/2	8	1	9-5/16	120	54.43
125	**5"**	13-1/8	14-5/8	8-1/6	1	10-1/4	140	63.50
150	**6"**	14-7/8	15-5/8	8-5/8	1	11-1/8	164	74.39
200	**8"**	18-11/16	21	11-3/4	1	15-9/16	330	149.69
250	**10"**	20-1/8	24-1/2	13-3/4	1	18	470	213.19
300	**12"**	26-1/4	29-3/4	16-3/8	1	23-1/4	820	371.95
350	**14"**	30-1/4	36-3/8	22-1/4	1-1/2	26-1/4	1300	589.67
400	**16"**	33-1/8	38-1/4	23-1/4	1-1/2	28-1/8	1600	725.75
450	**18"**	38-3/8	38	19	3	26-3/4	2260	1025.12
500	**20"**	41-1/2	43-5/8	23-1/2	3	34-1/8	2980	1351.70

Dimensions are a guide model FV40 and FV41 have different dimensions.

BASKET STRAINER FV40-41-SF SERIES INTEGRAL CAST 125/150LB



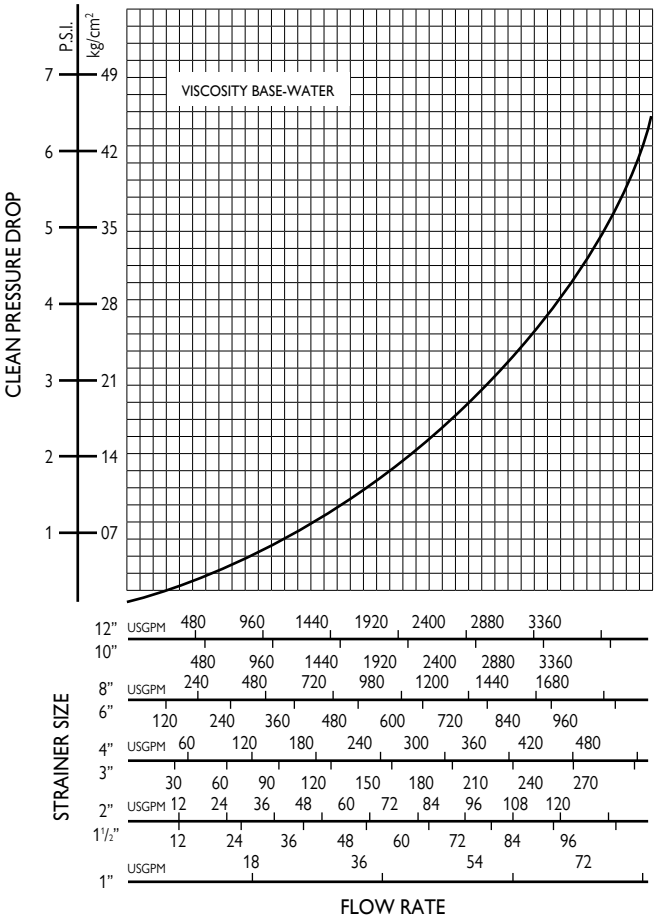
Bolted Bonnet Version



Bridge Closure

FLOW CHART

Simplex Strainers 25~300NB (1" to 12")
Pressure drop strainers with 3/32" or 1/8" perforated baskets



CLASS 125 PRESSURE & TEMPERATURE

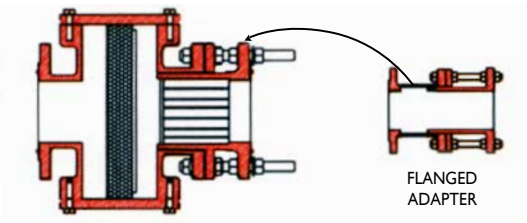
Type	Size (in)	kPa @ Temp W.O.G.	kPa @ Temp W.O.G.
Class 125 Bolted Cover	50-500 (2 - 20)	1551.32 37.78°C	1378.95 65.56°C
Class 125 Clamped Cover	50-500 (2 - 20)	1965.01 37.78°C	1378.95 65.56°C

Maximum "dirty" differential must not exceed 70 kPaD

CLASS 150 PRESSURE & TEMPERATURE

Type	Size (in)	kPa @ Temp W.O.G.
Class 150 Bronze Body	50-500 (2 - 20)	1551.32 37.78°C
Class 150 CS Body	50-500 (2 - 20)	1965.01 37.78°C
Class 150 SS Body	50-500 (2 - 20)	1620.27 37.78°C

Maximum "dirty" differential must not exceed 70 kPaD

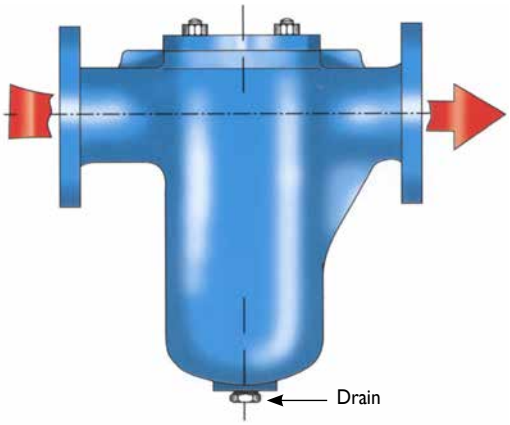


Also available with our "TKV" flow conditioner for more accurate metering and expansion joint.

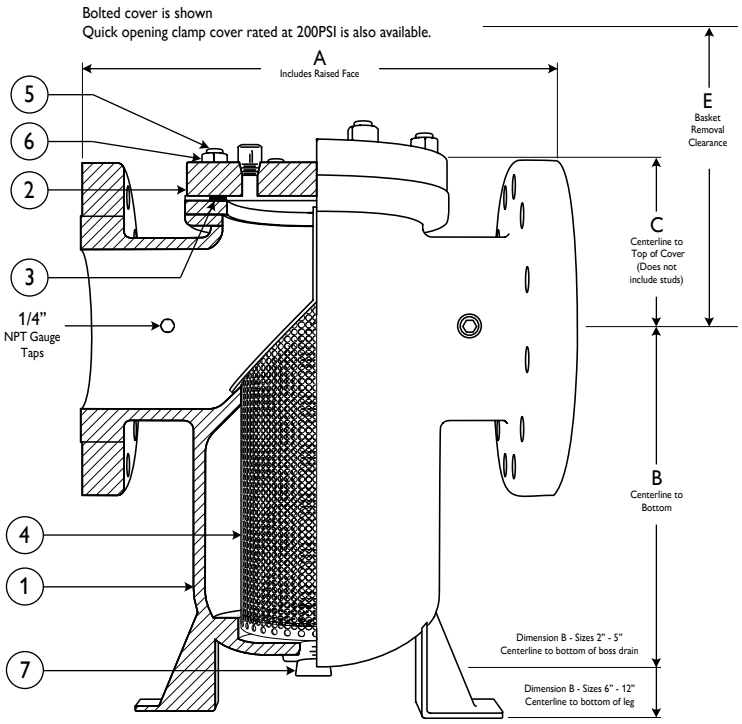
SCREEN

Any mesh size can be fitted from 100 microns.

BASKET STRAINER INTEGRAL CAST MODEL WFL 150B/300B/600B



Bolted Bonnet Version



Refer to drawing for dimensions

Basket type cast strainers in WCB, CF8 & CF8M
Heavy Duty spot welded S/S screens.
Suitable for water, oil & numerous fluid applications.

The WFL basket strainer has many unique design features including: Spot faced flange bolt holes, plugged bottom drain vent, cast-in support legs (larger sizes), encapsulated cover gasket and an optional quick opening cover design.

Minimal Pressure Loss
Pressure loss is minimised by providing a slanted straining element design and straight flow path.

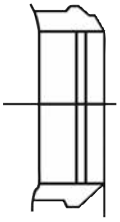
Large straining capacity
With its large body and sizeable straining element, the WFL has the ability to store large quantities of debris without affecting pressure loss - thus maximising time between servicing.

Self-cleaning option
Utilising a modified straining element, the bottom drain can be fitted with a ball valve to allow for the automatic cleaning or flushing of the straining element while keeping the pipeline in service.

MATERIALS LIST

No	Parts Name	Cast Steel	304 SS	316 SS
1	Body	A216-WCB	A351-CF8	A351-CF8M
2	Cover	A216-WCB	A351-CF8	AISI-CF8M
3	Gasket	Spiral / PTFE	Spiral / PTFE	Spiral / PTFE
4	Screen	AISI 304	AISI 304	AISI 316/304
5	Bolting	B7	B8	B8M
6	Nut	2H	Gr8	Gr8M
7	Drain Plug	A105N	AISI 304	AISI 316

Refer to detailed drawing.



L1/L2

BW
BUTTWELD

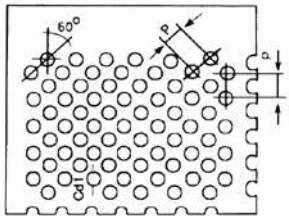
BASKET STRAINER INTEGRAL CAST MODEL WFL 150B/300B/600B

FLOW CHARACTERISTICS

When the strainer element is partially blocked the pressure drop incurred will be inversely proportional to the area remaining clean

PRESSURE/TEMPERATURE

Model	Max Cold Working Pressure W.O.G.	Max Working Pressure Steam
SL-WFL 150B -150LB Flanged	1965 KPA (285 PSI) WOG	1034 KPA (150 PSI) @ 350°C
SL-WFL 300B - 300LB Flanged	4964 KPA (720 PSI) WOG	2068 KPA (300 PSI) @ 450°C
SL-WFL 600B - 600LB Flanged	9928 KPA (1440 PSI) WOG	4136 KPA (600 PSI) @ 350°C
900 Class to 1500 Class please consult us.		



All strainers are tested to 1.5 times the maximum working pressure.
If for steam/high temp application you must advise so we can use high temp gasket.
Pressure limitations apply at maximum temperature.

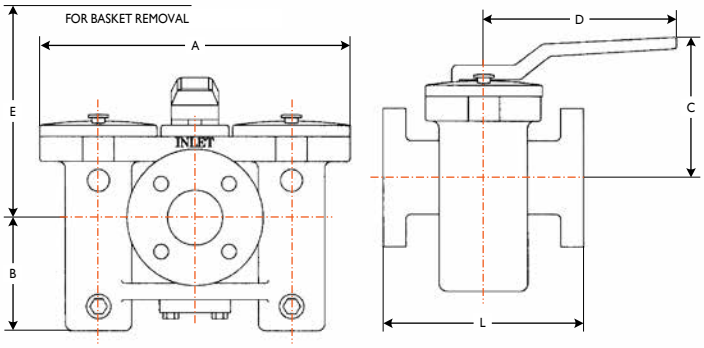
STANDARD SCREEN SPECIFICATIONS (ALL 304/316 SCREEN)

Nominal Size	Perforation "CD1"	Pitch Of Holes (P)	Screen Thickness	Approx Mesh Size	Micron Count
25mm to 50mm	0.8 to 1.5mm	2mm	0.4mm	#20	841
65mm to 150mm	1.0 to 3.0mm	3.5mm	0.5mm	#5	2000-3000
200mm to 250mm	3 to 3.2mm	4.5mm	0.6mm	#6	3360

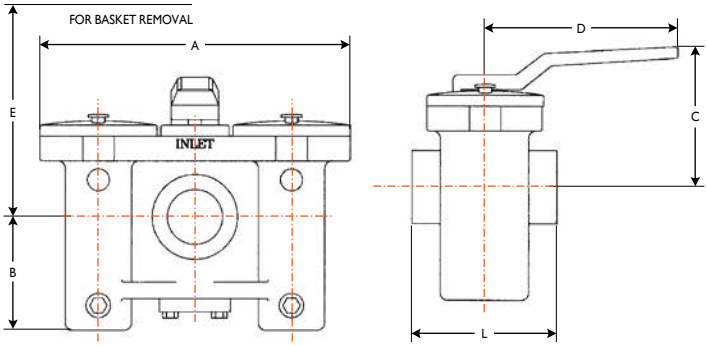
Example only, can supply any size mesh. We can also supply special mesh or bags as low as 37 microns for very low pressure/flow applications

DUPLEX STRAINER INTEGRAL DUAL BASKET MODEL FV61-SFV

FLANGED END



SCREWED END



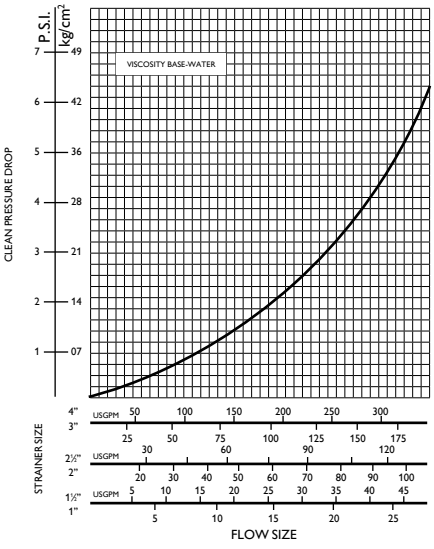
ANSI CLASS 125, PN16 - ANSI CLASS 150, PN20
ANSI CLASS 250, PN25 - ANSI CLASS 300, PN40

Flowturn Integral Duplex Dual Basket Strainer is designed for use in fluid handling systems where the flow cannot be shut down for basket cleaning.

A lubricated plug valve enables the flow to be switched to either basket allowing the alternate basket to be cleaned while isolated from the flow path.

FLOW CHART

Duplex Strainers 1" to 4"
Pressure drop for strainers with 3/32" or 1/8" perforated baskets (one chamber only)



PRESSURE & TEMPERATURE

CL 125 PN16 CI BODY	1378 kPa 37.7°C (200 PSI @ 100°F)
CL 150 PN20 CS/SS BODY	1965 kPa 37.7°C (285 PSI @ 100°F)
CL 300 PN40 CS/SS BODY	4964 kPa 37.7°C (720 PSI @ 100°F)

STANDARD PRODUCT MATERIAL COMBINATION

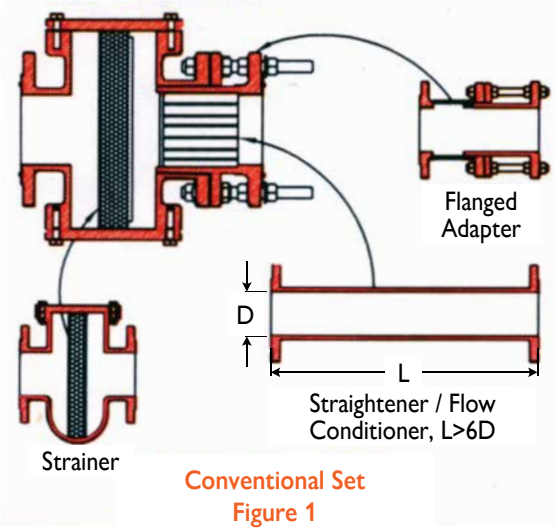
Ductile Iron Body and Cover, CF8 Plug, PTFE or Viton Seal, SS304 Basket
Carbon Steel Body and Cover, CF8 Plug, PTFE or Viton Seal, SS304 Basket
CF8 Body and Cover, CF8 Plug, PTFE or Viton Seal, SS304 Basket SS304
CF8M Body and Cover, CF8M Plug, PTFE or Viton Seal, SS306 Basket
Bronze Body and Cover, CF8M Plug, PTFE or Viton Seal, SS306 Basket

DIMENSION (INCH)

Size		Screwed End						Flanged End						Weight (Lbs)
		A	B	C	D	E	L	A	B	C	D	E	L	
DN20	**3/4"**	13.33	4.2	6	4.4	8.3	8.63	13.33	4.2	6	4.4	8.3	8.63	44
DN25	**1"**	13.33	4.2	6	4.4	8.3	8.63	13.33	4.2	6	4.4	8.3	8.63	44
DN32	**1-1/4"**	13.85	6.2	6	4.8	8.5	9.0	13.85	6.2	6	4.8	8.5	9.0	54
DN40	**1-1/2"**	13.85	6.2	6	4.8	8.5	9.0	13.85	6.2	6	4.8	8.5	9.0	65
DN50	**2"**	14.88	7.2	8	5.8	10.5	11.0	14.88	7.2	8	5.8	10.5	11.0	105
DN65	**2-1/2"**	15.38	9.2	8	7.2	12.6	13.0	15.38	9.2	8	7.2	12.6	13.0	160
DN80	**3"**	17.88	11.3	11	9.4	13.5	16.4	17.88	11.3	11	9.4	13.5	16.4	235
DN100	**4"**	25.33	14.4	11	10.6	17.0	17.9	25.33	14.4	11	10.6	17.0	17.9	400

150NB & over Drawing on request

3 IN 1 STRAINER EXPANSION JOINT FLOW CONDITIONER - MODEL TKV



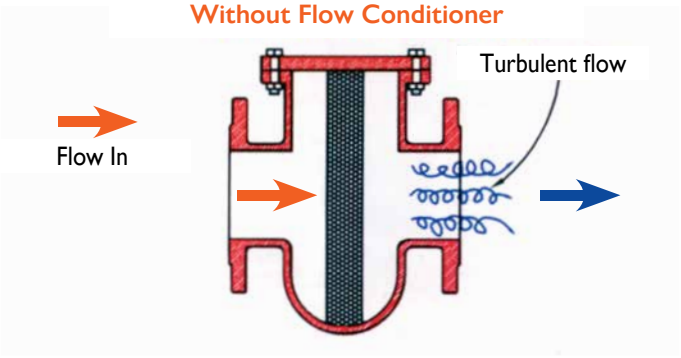
Conventional Set
Figure 1

APPLICATION

PN10 & PN16

Prevents damage to water meters by filtering the water entering water meter.

Increase water flow rates measuring accuracy of water meters.



MAIN FEATURES & BENEFITS

Stainless steel flow conditioner pipe set, able to reduce turbulent flow and creating laminar flow, thus increasing flow rates measuring accuracy of water meters. See Figure 2.

Stainless steel strainer mesh.

Built-in expansion joints allow flexible movements of the distances between flow meter, allowing ease of assembly.

Fusion Bonded Epoxy Powder (FBE) coating body.

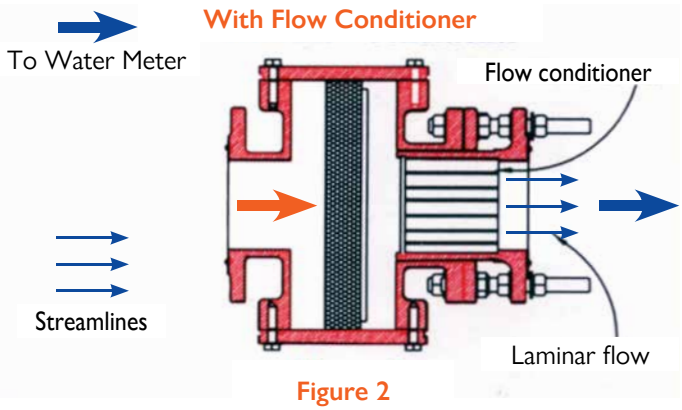
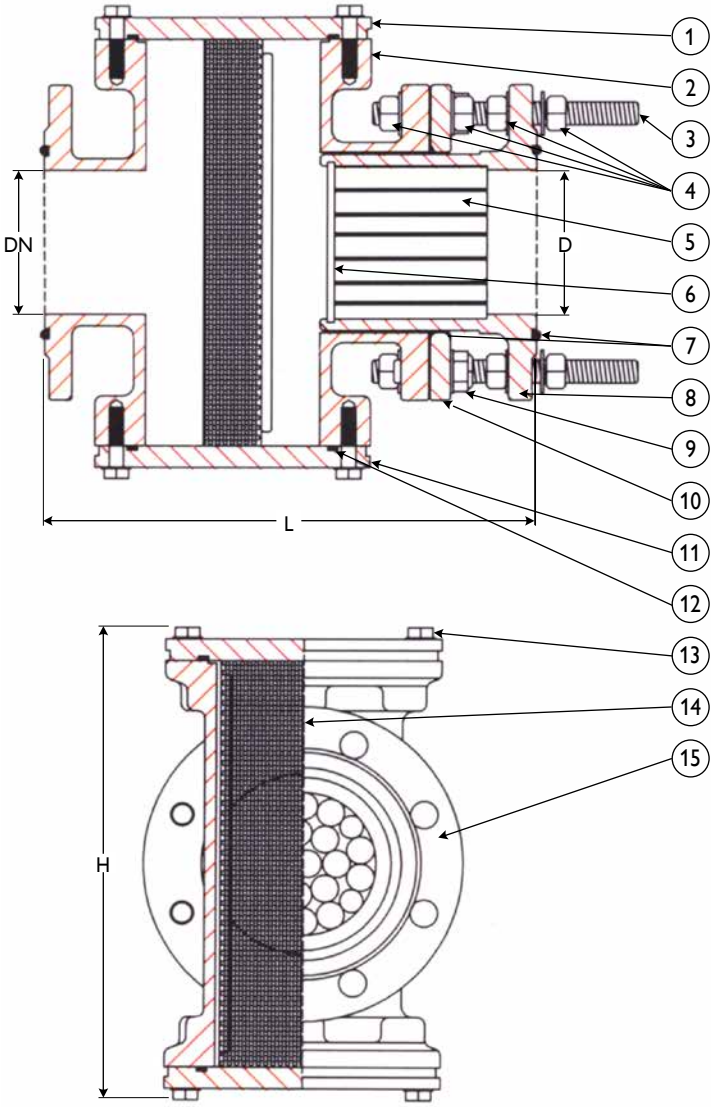


Figure 2

3 IN 1 STRAINER EXPANSION JOINT FLOW CONDITIONER - MODEL TKV



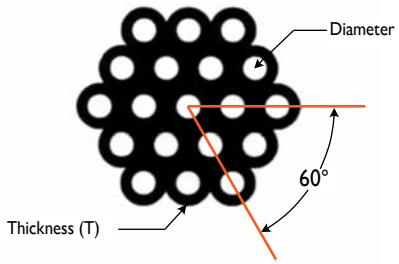
MATERIALS LIST

No.	Component	Material
1	Upper Cap	Ductile Iron, BSEN 1563 Grade 420/12
2	Strainer Body	Ductile Iron, BSEN 1563 Grade 420/12
3	Expansion Joint Stud	Zinc Coated Steel/S.S.,BS 970:Part 1 304
4	Nuts & Washers	Zinc Coated Steel/S.S.,BS 970:Part 1 304
5	Flow Conditioner Tube	S.S., BS 970:Part 1 304
6	Circlip	S.S., BS 970:Part 1 304
7	O-Ring Seal	NBR, ASTMD 2000 70°IRHD
8	Expansion Pipe	Ductile, BSEN 1563 Grade 420/12
9	Hex. Head Bolts & Washers	Zinc Coated Steel/S.S.,BS 970:Part 1 304
10	Press Ring	Ductile, BSEN 1563 Grade 420/12
11	Lower Cap	Ductile, BSEN 1563 Grade 420/12
12	O-Ring Seal	NBR, ASTMD 2000 70°IRHD
13	Hex. Head bolts & Washers	Zinc Coated Steel/S.S.,BS 970:Part 1 304
14	Filter Screen	S.S., BS 970:Part 1 304
15	Powder Epoxy	Corro-Coat EP-R, AWWA C213-96/ NZ4158.1 Part 1

DIMENSIONS

DN	D	H	Min.L	Max.L	Screen		Weight KG
					Dia.	T	
50	50	180	200	240	1.5	0.5	25
80	80	270	300	350	3.0	1.0	33
100	100	330	350	410	3.0	1.0	38
150	150	385	410	500	5.0	1.2	64
200	200	450	500	600	5.0	1.2	93

FILTER SCREEN



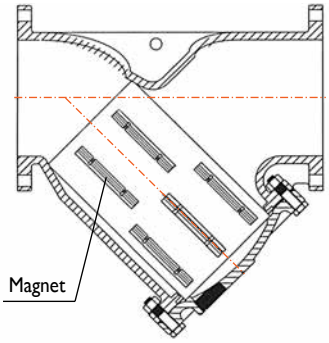
Feature	Specification
Works Test Pressure	Maximum=40 Bar
Flange Drillings	BSEN 1092-2: 1997/DIN 2501/ISO 7005 PN 16 other drillings available
Maximum Service Temperature	70°C

MAGNETIC SCREEN OPTION

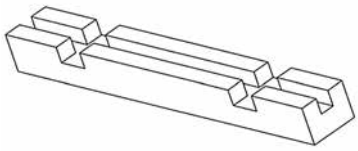
Magnetic Screen Inserts for added protection against fine ferrous metal particles.

- For extra protection for your hydraulic systems, pumps and other process & industrial applications.
- Magnetic screen assemblies prevent fine ferrous metal particles from passing through the screen and damaging bearings, seals, seats and other machined or soft surfaces.
- The magnets in these screen assemblies are positioned to obtain the strongest magnetic field possible, resulting in the most effective particle retention.

CHANNEL MAGNET

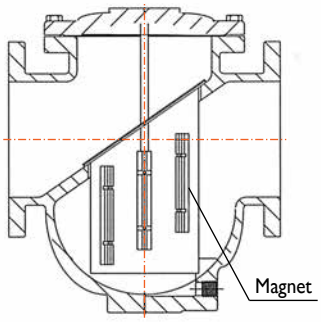


"Y" Type - Sizes
65NB to 450NB (2-1/2 to 18")



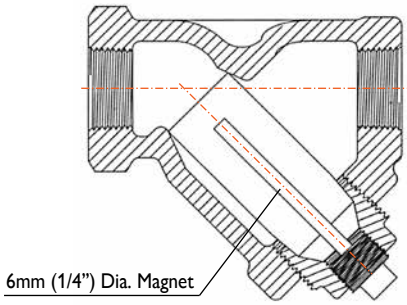
Channel Magnet

CHANNEL MAGNET

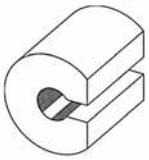


Basket Type - Sizes 80NB to 450NB (3" to 18")
50NB & 65NB (2" & 2-1/2")
Sizes use Horseshoe Magnets

ROD MAGNET

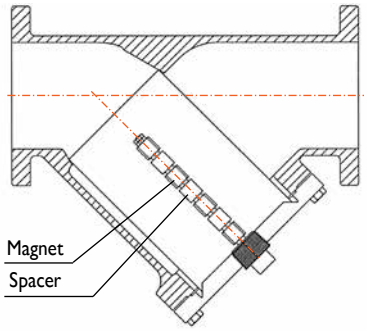


"Y" Type - Sizes
15NB to 80NB (1/2 to 3")



Horseshoe Magnet

HORSESHOE MAGNET



"Y" Type - Sizes
40NB to 80NB (1-1/2 to 3")

MAGNET QUANTITY

Size NB	15-32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
Size Inch	1/2 - 1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20
Y-Type	1	4	6	3	3	4	10	12	12	12	16	20	24	32	-
Basket Type			2	2	3	3	5	7	11	13	17	22	25	28	34

SPECIFICATIONS

Stainless steel bolts are used to assemble magnets to the screen. Magnets are equally spaced in each row. When two or more rows are used, the magnets are offset. Magnet material is Cast Alnico #5 or equivalent.

Rod magnet, "Y" type 15NB to 80NB **Horseshoe magnet**, 40NB to 80NB
Channel magnet, 65NB to 450NB and "Basket" type 80NB to 450NB

Magnetic screen assemblies are used with stainless steel screen material only.

The blow-off connection (drain) is integral with the magnet holder for rod or horseshoe type magnets. However with the Bolted Bonnet version a side drain can also be supplied.

CONSIDERATIONS OF TECHNICAL RISK / LIMIT OF LIABILITY FOR APV - FLOWTURN SIGHTGLASSES & STRAINERS

Australian Pipeline Valve don't consider in our design the following factors of risk:

1. APV-Flowturn 'Standard' Iron sight glasses and strainers can be used in a temperature range between -10 to +100°C up to 200°C depending on seals. (Note, pressure limitations apply above 38°C refer to Pressure/Temperature charts.) Australian Pipeline Valve-Flowturn 'Standard' iron valves are not suitable for low temperature service below -10°C. Steel and other grades of steel are as per ASME B16.34 but temperature is also limited by gaskets and seals.
2. The onus is on the customer to specify all materials of construction and service conditions. Australian Pipeline Valve shall assume standard materials and conditions if not otherwise specified.
3. Australian Pipeline Valve 'Standard' strainers and sight glasses are not equipped with devices suitable to avoid internal over-pressures caused by incorrect operations of process or by-fluids & liquids subjected to an increase of volume and/or pressure and/or blockage.
4. Australian Pipeline Valve 'Standard' strainers and sight glasses are not designed with special devices to withstand a sudden thermal jump (thermal shock).
5. In general Australian Pipeline Valve 'Standard' strainers and sight glasses are not mechanically designed to bear overloads due to exceptional atmospheric or natural phenomenon's (such as earthquakes).
6. In general Australian Pipeline Valve 'Standard' strainers and sight glasses are not designed to bear loads on flanges, on pipe connections or pipe-line.
7. The compatibility between the strainers and sight glasses construction materials and medium is selected by the user. The user is ultimately responsible for verifying the compatibility between medium and materials.
8. Abrasive or dirty service applications need to be considered and stated at time of order.
9. The installation shall be designed to provide adequate means of draining and venting to avoid harmful effects such as water hammer, vacuum collapse, corrosion and uncontrolled chemical reactions and to permit cleaning, inspection and maintenance in the correct manner.
10. Strainers and sight glasses have not been designed to include corrosion, erosion or abrsion alowances.
11. The piping system shall be so designed to reduce the risk of fatigue due to vibration of pipes.
12. APV-Flowturn strainers are suitable for liquid working pressures specified (cold working pressure 'cwp'[①]) on drawing and only when used in hydraulic installations in which shock is absent or negligible.

    Strainers and sight glasses are not designed to operate under high shock loadings. Where pressure increases occur due to shock loading (water hammer), they should be added to the working pressure to obtain the total pressure acting on the valve. The total must not exceed the pressure rating of the valve. A pressure surge, or shock, is usually caused by the rapid closure of a check valve or quarter turn valve resulting in a sudden reduction in flow rate.

    Where shock is likely to occur, the maximum shock pressure should be added to the working pressure ('cwp'[①]) of the line to determine working pressure of products in the line...also, hydraulic installations should be equipped with air chambers or other types of shock absorbers to eliminate, as much as possible, increase in pressure due to shock.

    Maximum operating pressure reduces as service temperature increases. Pressure and temperature limitations are as per ASME B16.34 or ASME B16.1 and as shown on the drawing - gaskets and internal components all reduce temperature rating. Cold working pressure[①] or class is shown on the identification plate and drawing, and must not be exceeded.

    [①] *Cold Working Pressure 'cwp' : where 'Cold Working Pressure' is the maximum rated pressure of the valve at a temperature up to 65°C (150°F). Pressure rating shown on drawing, labels and certificate is always cold working pressure non-shock.*

START-UP

Before installing the strainer onto the pipe-line it is mandatory, for the user, to verify the compatibility of the strainer or sight glass with service conditions (medium, temperature and pressure). With reference to standard strainers held in stock, the reseller and end user will have to assure themselves of the compatibility between the strainer and the conditions required by the customer.

Before using the valve in a potential explosive atmosphere it's necessary for the customer to: -

- To verify the correct type of strainer or sight glass is specified.
- To verify the compatibility between the strainer and the zone in which the strainer or sight glass should be installed
- To foresee the pipe-line ground condition on which the strainer or sight glass should be installed
- To check that the temperature if the valve surface is not higher than the flammable point of the atmosphere in which the strainer or sight glass is installed (in this case specify an insulating cover device for the strainers)
- To avoid mechanical knocks during the installation that may cause sparks.

Australian Pipeline Valve cannot be held responsible for damage caused by use of the product for any reason, especially if it is improper use or modified.

APV

AUSTRALIAN PIPELINE VALVE®

COMPLETE PRODUCT LINE

"Australian Pipeline Valve produces isolation, control and flow reversal protection products for severe and critical service media in utility, steam, pipelines, oil & gas and process industries. APV valves and pipeline products form the most competitive portfolio in the market."

FLOWTURN®

STEAMCO®

SUPER·CHECK®

SUPERSEAL®

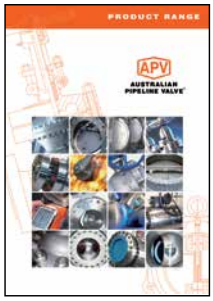
TORQTURN®

TWIN-LOK®

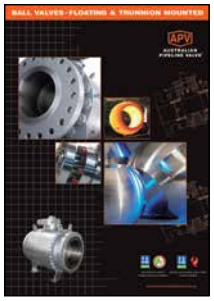
UNIFLO®

DIAMOND GEAR®

AUSTRALIAN PIPELINE VALVE BRAND RANGE - CATALOGUES

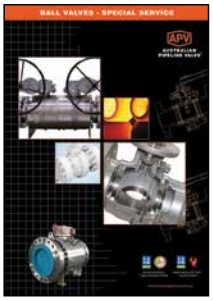


Product Brochure



Ball Valves Floating & Trunnion Mounted

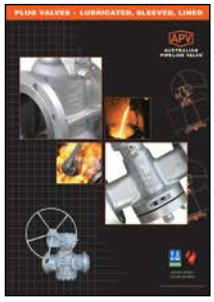
Ball Valves Floating Small Bore



Ball Valves Special Service

Gate, Globe & Check Valves - Cast Steel

Gate, Globe & Check Valves - Forged Steel



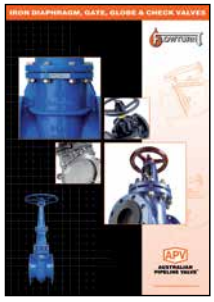
Plug Valves Lubricated, Sleeved & Lined

Oilfield Products Valves & Wellheads

APV FAMILY OF BRANDS RANGE - CATALOGUES

Diamond Gear Gearboxes

Flowturn Ball Valves Multiway & Deadman



Flowturn Gate, Globe & Check Valves

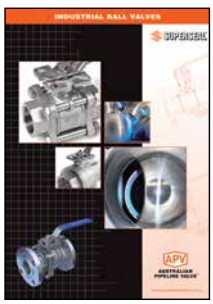
Flowturn Instrument Valves

Flowturn Strainers & Sight Glasses

Steamco Steam Valves

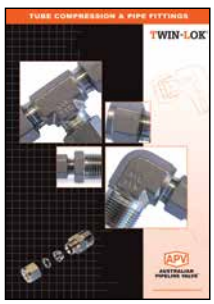
Supercheck Wafer Check Valves

Superseal Butterfly Valves

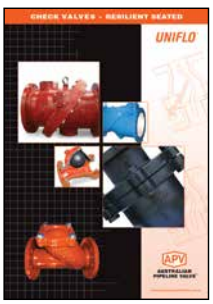


Superseal Industrial Ball Valves

Torqturn Actuators



TwinLok Tube & Pipe Fittings



Uniflo Check Valves

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LOCAL DISTRIBUTOR

QUALITY ASSURANCE AND CERTIFICATION

We are continually improving all facets of quality assurance. Full metallurgical and test certificates are always supplied for all pressure retaining parts.

We have endeavoured to provide a broad outline of our range and capabilities. Because we are continually developing new products for our customers this catalogue will, to some extent be incomplete. This catalogue is a general overview only, individual drawings and data sheets can be furnished on request.

If you have any requirement in the field of valves and pipeline products, please contact us for a prompt response. Continuous development of Australian Pipeline Valve products may necessitate changes in the design or manufacturing processes. Australian Pipeline Valve reserves the right to effect any such changes without prior notice.

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