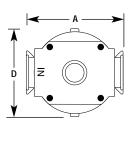
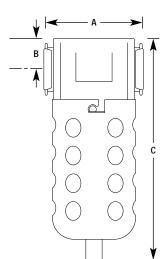
T53 Automatic Drain







APPLICATIONS

- Drop Leg Drain
- External Filter Drain

The T53 series float type drain is provided with a top threaded port. This drain features a protective stainless steel screen with an umbrella baffle, providing a large sump area for oil sludge and dirt. It is used to give continued performance and low maintenance to drain accumulated water and oil from drain lines, receiver tanks, condensate drop legs and filters.

DIMENSIONS						
Model No.	Connection FPT	Dimen A	sions (IN B	ICHES) C	D	Weight (lbs.)
T53-02	1/4"	23/4	31/4	61/2	21/4	1.0
T53-04	1/2"	23/4	31/4	61/2	21/4	1.0

Internal Float Drain - 5200



Automatically drains collected liquids when internal float indicates accumulation. Saves air loss. For standard size filter.

Overnight Bowl Drains



Arrow's Automatic Overnight drain operates when a compressed air system is shut down. It clears accumulated condensate from a filter bowl when pressure falls to 3 psig or less. Available for either plastic or metal bowls.

Kit Ordering #

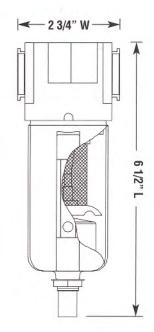
Model J - For plastic bowls - push to manually drain Model K - For metal bowls - twist to manually drain

32008 CKFK

High Pressure/Chemical Resistant

T54W Compact Zero Loss Drain





P/N T54W 1/2" FPT

Max. Press. 250 PSIG Max. Temp. 130°F

Features

- Compact design 6 1/2" L X 2 3/4" W
- 50 mesh s/s screen to protect float from solid chips
- · Plastic float and housing compatible with most compressor oils.
- Metal filter housing with sight glass has a 1/2" FPT top connection.

Applications

For use in removing liquid water and oil from receiver tanks, separators, large filters and other areas where liquid condensation occurs in a compressed air system.

DKTF4W O.S.H.A. Lockout Slide Valve & Zero Loss Drain



P/N DKTF4W 1/2" NPT

Arrow has combined two outstanding products. Our 1/2" O.S.H.A. Lockout 3-Way Slide Valve and Compact Zero Loss Drain allows the drain to be serviced without interuption of compressed air usage.

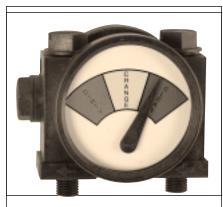
Max. Press. 250 PSIG Max. Temp. 130°F

Features

- 3 way slide: when closed, the compressed air vents out of the drain housing allowing removal of the drain for servicing.
- The slide provides a pad lock hole in the closed position which meets O.S.H.A. lockout requirements.
- When drain servicing is complete, the slide valve is pushed to the open position with no interruption off compressed air service.

Pressure Gauges & Accessories

Delta 'P' Gauge



Reed Switch Specifications					
Max. Voltage Switching	Max Switch Current	Max. Carrying Current	Contact Rating		
100 AC/DC	.30 AMPS	1 AMP	10 VA		

FUNCTION

Allows exact determination of pressure drop across element. Divided into three sections, each marked for easy understanding. The differential pressure gauge is the best tool available for determining element maintenance requirements.

Color	Indicates	Pressure Drop
Green	Clean	0-6 psi
Yellow	Change	6-9 psi
Red	Dirty	9-12 psi

Maximum Pressure:

• 300 psig / 20 bar

Maximum Temperature:

• 200° F / 93° C

Weight:

• .33 Lb. / 1.5 Kg

Bolt Threads:

• 3/8 -24 Inches

Bolt Material:

• Glass filled Nylon

GAUGE MODELS

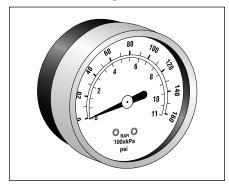
- DP10-A* Replacement unit only Basic model with 3/8-24 slotted bolts
- DP10-AE*
 Basic model with ³/₈-24 slotted bolts and Reed Switch
- DP10-B Gauge with Remote Mounting Block
- DP10-BE Gauge with Remote Mounting Block and Reed Switch

KITS AND ACCESSORIES

- MK-10 Mounting Kit for vertical or wall mounting
- 1K-10
 1/4" Tubing Kit with Connector Fittings
- * Model No. DP10-A & DP10-AE to mount directly on existing filter head for
- replacement only.
 ** Model No. DP10-B & DP10-BE remote model with slotted bolts & mounting

Note: To order pre-mounted units, adds suffix "D" to filter #.

Pressure Gauges



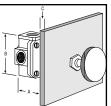
PART NO.	DESCRIPTION	PRESSURE RANGE	USED ON
1481C	2" face, 1/4" center back mount	0-30 psi	
1481A	2" face, 1/4" center back mount	0-60 psi	Tri•Star Tri•Star II
1481	2" face, 1/4" center back mount	0-160 psi	High Flow
1481B	2" face, 1/4" center back mount	0-300 psi	9
1681C	11/2" face, 1/8" center back mount	0-30 psi	Mini
1681A	11/2" face, 1/8" center back mount	0-60 psi	Regulators and
1681	1½" face, ½" center back mount	0-160 psi	Mini Integral

Regulator Accessories

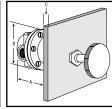
Arrow regulators may be panel mounted to improve machine design and overall appearance, they are convenient for control panel or console mounting.

Suffix P Tri-Star & Midflow

Suffix Q Tri-Star & Midflow

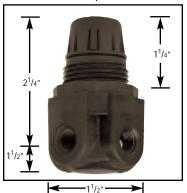


Suffix P (1500 Series Regulators)

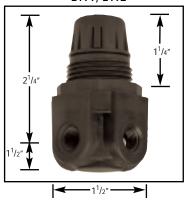


Panel Mounting Regulators					
Regulator Suffix Panel Dimensions & Max.					Max.
Model	for Panel Mt.	Hole Size	Α	В	С
Tri-Star, Midflow & Precision Series	Р	1 ¹³ /16"	11/4"	2 ²² /32"	1/2"
Tri-Star, Midflow & Precision Series	Q	9/16"	31/2"	2 ²³ /32"	⁵ /16"
1588	Р	3/4"	5″	43/4"	1/4"

E291, E292



E191, E192



Miniature Relief Valves

Miniature, diaphragm operated relief valves with exceptional sensitivity. Ideally suited for applications requiring gradual proportional relief. 3 position knob pushes to lock and can be removed for tamper resistance.

Ordering Information					
Pipe Size	Model No.	Description			
1/8"	E291	All Plastic non-corrosive parts.			
1/4"	E292				
1/8"	E191	Die cast black coated body, brass seat.			
1/4"	E192	Buna N Diaphragm			

Specifications

- E291, E191 all 1/8" ports
- E292, E192 ¹/₄" ports
- With 1/8" gauge ports

Maximum Pressure Range

• 150 PSI

Options

- B 2-Position Mechanical Lockout Knob
- G Gauge (0-160 psi)
- I Instrumentation pressure, 1 15 psig

Maximum Temperature Range

• 40°F to 120°F

- L low pressure 0 50 psig
 - P panel mount nut

 - U No Gauge Ports
 - V All 1/4" Ports (4)

Air Relief Capacity - SCFM						
Range (psig)	Spring	entation Range o 15	Spring	ressure Range to 30	Spring	l Pressure Range o 125
Set Pressure (psig)	5.0	10.0	20.0	40.0	60.0	80.0
Rated Flow @ 10%*	.1	.3	.5	4.0	.2	5.5
Rated Flow @ 20%*	.3	.7	2.8	15.0	6.5	14.0
Rated Flow @ 30%	.5	2.3	6.8	25.0	15.0	23.0

Reseat @ ±1% of Set Pressure

- 1) Rated flows in SCFM are taken at percentage of pressure over set pressure.
- 2) The relief valve will not function as a pressure regulator excess pressure must be vented to atmosphere.

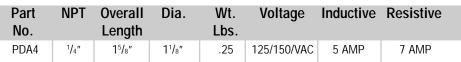
PRESSURE SWITCH

The PDA4 pressure switch can be installed anywhere in a pneumatic or hydraulic system. It is often used to protect air compressors and pneumatically operated equipment from damage caused by over-pressurization. The unit can be set in a normally open or closed position in an adjustable actuation range from 25 PSIG to 95 PSIG with ± 2% repeatability. The pressure switch has standard 18" wire leads of 300 V, 22 SWG. For simple installation, thread the unit into the gauge port of a regulator or pipe

Construction: Zinc die cast and plastic housing, and NEMA 13 electrical enclosure which is U.L. approved.

Max. operating pressure: 300 PSI

Operating temperatures: 35°F to 180°F



Standard Electrical Circuit				
Wire Color	Circuit			
Black	Common			
Green	Normally Closed			
Red	Normally Open			

Note: 20% differential for reset, and 1% repeatability when operated within recommended conditions.

Slide Valve

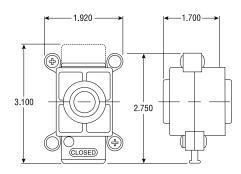


Arrow's new slide valve is a 3 way OSHA lockout valve which exhausts all downstream pressure when closed, and can be locked in the closed position with customer supplied padlock.

3-Way Slide Valves (Open or close and exhaust) Meet O.S.H.A. Lockout Standard 29CFR 1910.147 - The 3-way slide valve is for use in the main line, upstream of equipment. When closed, it shuts off the upstream air and exhausts the downstream air.

Body is black coated zinc. Slide is 5% Teflon, high-impact, safety yellow plastic. Seals are pre-lubricated Buna O-rings. Screws are black coated steel.

Maximum operating pressure: 250 PSIG Maximum operating flow: 140 SCFM Operating temperatures: 35°F to 150°F Exhaust bleed at 100 PSI: 7 SCFM



Valve Type	Standard Line With Threaded Ports Model Port Size			
3 Way	V202	1/4"		
OSHA Lockout Valve	V203	³ / ₈ "		
Customer to Supply Lock	V204	1/2"		

Mini In-Line Desiccant Dryer (-30°F Dew Point)



Used at the point-of-use, this patented, disposable, mini in-line desiccant dryer removes all traces of water vapor, oil vapor and dirt. It is often used directly upstream of blow guns or spray guns as final protection for critical parts blow off and paint spraying. Install in either direction; it functions in both directions. A 40 micron, porous bronze element removes fine dirt particles, an oil removing media removes oil vapor, and desiccant beads adsorb water vapor. The see-through housing shows desiccant color change, which indicates that the dryer needs to be replaced.

SPECIFICATIONS

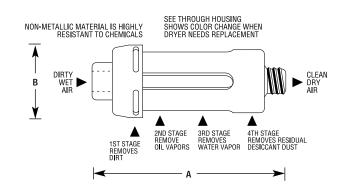
Polycarbonate material allows clear desiccant visibility

Guard

Nylon guard

Maximum Flow Capacity: 15 scfm Maximum Pressure: 125 psi Maximum Temperature: 130° F

APPLICATIONS · Parts blow off · Paint guns

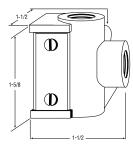


DIMENSIONS					
Connection NPT/FPT	Model No.	Dimension A	ns (Inches) B	Weight	
1/4"	DFD-10	3 3/4"	1 11/16"	2.8 oz.	

Tri • Star Inserts & Accessories

Tri•Star Outboard Diverter

The Tri•Star Outboard Diverter block attaches to the outlet port of any Tri•Star unit and allows air to be diverted to up to 31/4" outlets. Includes locking plate and "O" rings, and it will accept the Tri.Star mounting bracket.



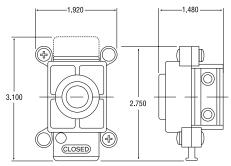
Model No.	Description
DK54	1/4" NPT Outboard Diverter Kit



OSHA Lockout, 3-Way Valve

Arrow's 3-way OSHA lockout valve exhausts all downstream pressure when closed and

can be locked in the closed position with customer supplied pad lock. These valves will handle all Tri•Star system air flows and will exhaust 6 scfm @ 100 psi.

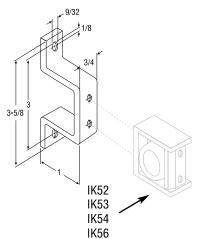


Model No.	Description
V252	1/4" OSHA Lockout Valve
V253	3/8" OSHA Lockout Valve
V254	1/2" OSHA Lockout Valve



Mounting Bracket

IBK5 wall mounting bracket for Modular Tri•Star FRL units permit bracket mounting from inlet and outlet ports, slide valve and diverter blocks

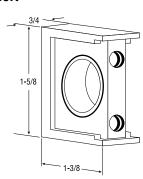


Modular Components & Accessories



Tri•Star Connector Insert

Tri•Star insert slides are designed to guide the insert to an interlocking position on the unit body. The design of the slide also provides a unique safety feature, should the insert plates be removed while the air line is under pressure, the interlocking slide will prevent blowing away.

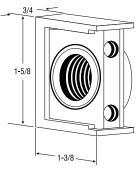


Model No.	Description
IK50	Tri•Star Connector Insert



Tri•Star Pipe Port Insert

Any of four separate Tri•Star ports permit instant pipe sizing of every Tri•Star filter, regulator and lubricator. Available in 1/4", 3/8'', 1/2'', and 3/4'' pipe sizes for inlets and outlet ports. Zinc diecase metal. A special Tri•Star locking design prevents backing out of lock plate screws and keeps the screws in place when the plate is removed.

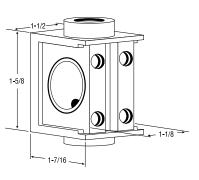


Model No.	Description
IK05	"O" Rings for Modulars
IK52	1/4" NPT Pipe Port Insert
IK53	3/8" NPT Pipe Port Insert
IK54	1/2" NPT Pipe Port Insert
IK56	3/4" NPT Pipe Port Insert



Tri•Star Diverter

The unique Tri•Star diverter permits a portion of filtered air to be branched before entering the regulator and sends it to another location; or when installed after the regulator, it will divert a portion of regulated air. The diverter is also used when pressure drop readings are required.



Model No.	Description	
DK52	1/4" NPT Inboard Diverter Kit	
DK53	3/8" NPT Inboard Diverter Kit	

Slide Valve

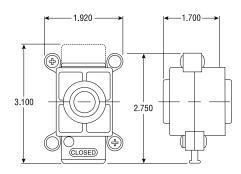


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Maximum operating pressure: 250 PSIG Maximum operating flow: 140 SCFM Operating temperatures: 35°F to 150°F Exhaust bleed at 100 PSI: 7 SCFM



Valve Type	Standard Line With Threaded Ports Model Port Size				
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Customer to Supply Lock	V204	1/2"			

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SPECIFICATIONS

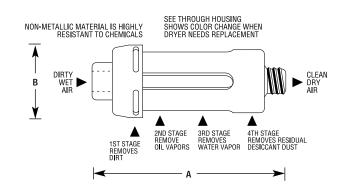
Polycarbonate material allows clear desiccant visibility

Guard

Nylon guard

Maximum Flow Capacity: 15 scfm Maximum Pressure: 125 psi Maximum Temperature: 130° F

APPLICATIONS · Parts blow off · Paint guns



DIMENSIONS						
Connection NPT/FPT No. Dimensions (Inches) Weight B						
1/4"	DFD-10	3 3/4"	1 11/16"	2.8 oz.		



The compressed air flow path through the dryer assures desiccant packing and maximum utilization of the desiccant's adsorption qualities. The compressed air enters the dryer (1) and is dispersed through a 70 micron polypropylene element (2) for the removal of particles. The air is then distributed uniformly through the full desiccant bed (3) to the bottom of the intake tube (4). The intake tube is protected by a 40 micron porous bronze element (5). As the desiccant adsorbs moisture, a dramatic and highly visible color change from dark blue to light pink is evident. The color change works its way through the desiccant as the adsorbative qualities of the desiccant are diminished. Once the color change is visible through the exclusive sight dome (6), the full desiccant bed has reached its maximum drying capacity and must be either changed or regenerated. Dry air exits through the inside diameter of the intake tube (7) and out the outlet port of

ADSORPTION

the unit (8).

Adsorption means the attraction of a substance - the adsorbate - to, and its subsequent accumulation on, the surface of a solid material - the adsorbant which is caused by physical forces of attraction. Adsorbants are substances which are permeated by a large number of very fine pores which give rise to a large internal surface area. This, in turn, determines the adsorption capacity of the adsorbant, since a large internal surface can accommodate more adsorbate. Other factors which influence the amount of adsorbate are: temperature, relative humidity and pressure.

REGENERATION PROCESS

Regeneration is accomplished by heating the desiccant to a temperature of 275°F in a drying oven. Regeneration is complete when the desiccant returns to its blue color.

For extended life and protection of the desiccant and equipment being serviced, an F3 Prefilter and F5 Coalescing filter should be used as a prefiltering system ahead of the dryer.

IN-LINE DESICCANT DRYER





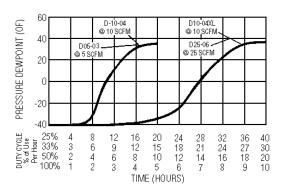
D10-04



In-Line Desiccant Dryer

FEATURES

- Available in capacities from .5 to 50 scfm
- · Compact sizes are ideal for portable or original equipment
- Drying efficiency can be tailored to your needs down to -30°F pressure dew point
- Highly visible color change from blue to pink through exclusive sight-glass highlights the need for service
- Exclusive hard spherical bead resists attrition and dusting and can be recharged
- Exclusive intake flow design takes air through entire supply of desiccant for maximum drying capacity
- Built-in particulate after-filter prevents downstream dust
- Needs no electrical connection
- No "purge air" lost as with regenerative dryers



SPECIFICATIONS

Bowl

- D05-03: Metal with sight gauge
- D10 & D 25: Metal with sight gauge
- D10-04XL: Metal with sight gauge

Desiccant

• Silica gel

Maximum Pressure

• 250 psig

Operating Temperature Range

• 0°F to 120°F

APPLICATIONS

- · Always install an F5 coalescing filter upstream of the D05, D10 & D25
- For compressed air service only
- Not to be used on life support systems or breathing air systems
- Dry air for parts blowoff
- Paint spray systems
- Air gauging equipment
- · Laboratory air

KITS

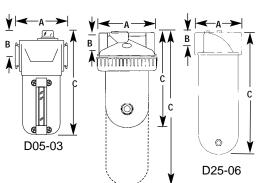
Replacement Desiccant No. 34189 – 6 pack of 1 qt. jars No. 34417 – 4-1 gallon jugs

Check the exhaust element to avoid high pressure drop due to desiccant dust entrapment. We recommend replacement of the exhaust element.

D05, D10 & D10XL Use:

Element Kit EKD10 (1-pack each)

D25 Use: Element Kit EKD25 (1-pack each)



	DIMENSIONS									
PIPE SIZE	MODEL NO.	MAX. F SCFM*	LOW SCF*	DESICCANT WEIGHT (LBS.)	DESICCANT CHARGE	DIMENSI A	ONS (IN) B	CHES) C	WEIGHT (LBS.)	
3/8"	D05-03	.5 to 5	830	5/8	10 oz.	33/4	1 ¹ / ₈	81/4	2.7	
1/2"	D10-04	5 to 15	2500	11/4	1 Qt.	47/8	11/8	87/8	5	
1/2"	D10-04XL	15 to 25	5000	21/2	2 Qt.	47/8	1 ¹ /8	13 ¹ / ₂	7	
3/4"	D25-06	25 to 50	12500	6	1 Gal.	63/4	2	173/4	23	

^{*} SCFM and SCF based on 70°F inlet temp. @ 100 psig

D10-04 D10-04XL



· The StageAir Drying System is a point-of-use drying system and is protected by an OSHA Lockout valve which exhausts all downstream pressure when closed, and can be locked in the closed position with customer supplied padlock, exhaust 6 SCFM at 100 PSIG to prevent element damage.

Note: When pressurizing, open slide valve slowly to prevent element burst.

StageAir Drying System

HOW IT WORKS

FIRST AND SECOND STAGE

- The StageAir desiccant air drying system begins with the dual stage integral filter/regulator
- First, the air enters the particulate filter, which has a 5 micron cleanable sintered bronze element. In this stage, corrosive moisture, pipe scale, dirt and rust are removed from the air line protecting the precision parts in the regulator.
- Next, the air enters a high-performance regulator, which reduces primary pressure to a desired pressure setting.

THIRD STAGE COALESCING FILTER

• During Stage 3, fine filtration takes place. Here, 99.99 percent of oil aerosols and microscopic particles down to .01 micron absolute are removed from the air. The pop-up indicator alerts customer that an element change is necessary.

FOURTH STAGE DESICCANT AIR DRYER

- · As the air enters the desiccant dryer, it is dispersed through a 70 micron element. The element distributes air evenly through the desiccant bed. The desiccant absorbs the water vapor from the air, producing a -40°F pressure dew point.
- . To remove traces of desiccant dust before the air leaves the system, the air passes through a 40 micron filter element. The air is now clean and dry, and has been properly treated for use with your air operated system.
- · The clear indicator sight glass shows a color change in the desiccant from blue to pink which indicates a desiccant recharge.

OPTIONS

To order options for the VC7500 series. simply add the appropriate suffix, as listed below, to the part number in the alphabetical/numerical order.

- 3 3 micron absolute element (particulate filter)
- F Float drain
- J Overnight Drain

KITS

 Internal Float Drain 	.5200
Element Kits	
• 5 micron	.EK35-5
• .01 micron	.EK55A
Desiccant Kit	
• 6-Pk. of 1 Qt. Jars	.34189

Mounting Kit see page 65 • Mounting kit ABK-10

Applications

- Paint Spray
- · Air Gauging Equipment
- · Lab Air

← A →
<u> </u>
B

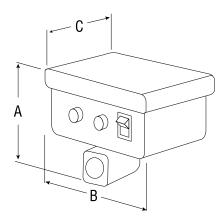
DIMENSIONS									
PIPE Size	MODEL NO.	MAX. I SCFM*	FLOW SCF*	DESICCANT WEIGHT (LBS.)	DIMEN A	SIONS (IN B	ICHES) C	WEIGHT (LBS.)	
1/2"	VC7510	5 to 15	2,500	1 ¹ / ₄	14 ¹ / ₄	4	111/4	10	
1/2"	VC7510XL	15 to 25	5,000	21/2	14 ¹ / ₄	4	161/4	13.5	
3/4"	VC7525	25 to 50	12,500	6	16 ¹ / ₂	4	201/8	24.25	

^{*} SCFM and SCF based on 70°F inlet temp. @ 100 psig

ACCESSORIES

Economatic Drains





Arrow developed the **heavy duty** ECONOMATIC drain valve to be a low cost answer to leaking, clogging, noise and other problems caused by float-type drains.

A solenoid controlled by a solid state timer opens and closes the ECONOMATIC drain valve in 1 to 60 minute cycle times and 1 to 30 second blow down times. Both times are individually adjusted.

The drain is designed with a manual override switch with indicator light.

ECONOMATIC drains also feature a spring loaded softseat solenoid which eliminates valve noise and assures leak-proof shutoff.

Installation of the drain is simple and quick – thread on and plug in.

SPECIFICATIONS Adjustable Cycle Time

• 1-60 minutes

Adjustable Drain Time

• 1-30 seconds

Maximum Working Pressure

• 200 psig

Maximum Fluid Temperature

- +165°F
- NEMA one enclosure
- Voltage: 115V / 1 ph / 60Hz
- 0.25 amps
- Buna-N seals
- 6´ heavy duty grounded power plug

Purge Rate

• 16 scfm open flow @ 100 psig

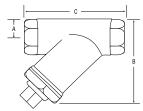
Mounting Kit see page 65

• Mounting kit BR5702

DIMENSIONS						
Model No.	Weight					
5702S	1/4"	31/4"	315/16"	43/16"	1.365	
5704S	1/2"	41/16"	315/16"	4 ³ / ₁₆ "	1.745	

Y Strainer – furnished with each Economatic Drain





A Y Strainer installed ahead of an external drain, traps large debris and sludge; prevents malfunctions and extends the life of automatic drains.

FEATURES

- Cast brass manufactured in the U.S.
- 300 psi maximum working pressure
- 50 mesh stainless steel screen can be cleaned or replaced without removal of strainer from the line
- 3/8" removable plug for quick draining

DIMENSIONS							
Model No. Connection Dimensions (inches) A B C Weight							
S202	1/4"	15/32"	227/64"	211/16"	10.5 oz.		
S204	1/2"	11/16"	25/8"	211/16"	12 oz.		