Safety Shut Off Valves



5U24W704 5U24W724

The V3V Syntesi® SAFE AIR® is a three-way safety valve designed to vent downstream systems on demand — ideal for maintenance operations or whenever compressed air needs to be safely purged from machinery and equipment. Built-in spool position diagnostics give you real-time confidence in valve status.

Certified to EN ISO 13849 and independently verified by Bureau Veritas, the SAFE AIR® is available in single-channel (Category 2 / PLd) and redundant double-channel (Category 4 / PLe) configurations to match the performance level your application demands. The double solenoid spring return offers fail-safe redundancy; de-energizing either valve discharges the system, so a stuck spool on one valve doesn't compromise safety.

Features

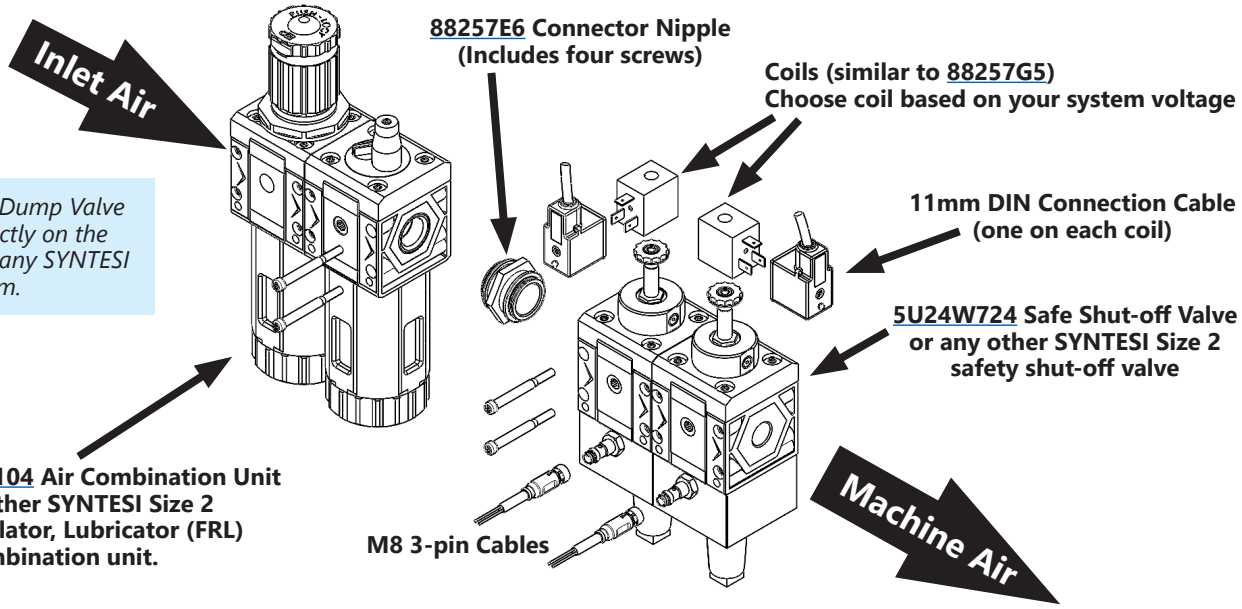
- Fluid – compressed air or other inert gases
- Fits onto Syntesi Vave Air Prep units.
- Port sizes from 3/8in NPT to 1in NPT
- Integrated diagnostics – inductive sensor monitors spool position in real time
- Optional redundant double-channel version – two monitored valves arranged in series (port 2 of valve 1 to port 1 of valve 2)
- Exhaust silencers are included

Metal Work Pneumatic SYNTESI Safety Shut Off Valves Selection Guide

Part Number	Price	Max Safety Rating	Syntesi Size	Inlet Port	Outlet Port	Exhaust Port	Flow Coefficient	Weight (lb [kg])	Fluid	Drawing
Single Solenoid Spring Return										
5U23W703	$357.00	Up to PLd	2	3/8in female NPT	3/8in female NPT	1/2in female NPT	3.2	2.03 [920]	Air	PDF
5U24W704	$357.00	Up to PLd	2	1/2in female NPT	1/2in female NPT	1/2in female NPT	3.5	1.96 [890]	Air	PDF
5U25W705	$364.00	Up to PLd	2	3/4in female NPT	3/4in female NPT	1/2in female NPT	3.7	1.96 [890]	Air	PDF
5U26W706	$364.00	Up to PLd	2	1in female NPT	1in female NPT	1/2in female NPT	3.7	1.92 [875]	Air	PDF
Double Solenoid Spring Return										
5U23W723	$704.00	Up to PLe	2	3/8in female NPT	3/8in female NPT	1/2in female NPT	2.3	4.06 [1842]	Air	PDF
5U24W724	$704.00	Up to PLe	2	1/2in female NPT	1/2in female NPT	1/2in female NPT	2.5	3.92 [1778]	Air	PDF
5U25W725	$712.00	Up to PLe	2	3/4in female NPT	3/4in female NPT	1/2in female NPT	2.5	3.92 [1778]	Air	PDF
5U26W726	$712.00	Up to PLe	2	1in female NPT	1in female NPT	1/2in female NPT	2.5	3.86 [1751]	Air	PDF

Assembly of Air Prep System

The SYNTESI Safety Dump Valve can be installed directly on the downstream side of any SYNTESI Size 2 air prep system.



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Metal Work Pneumatic SYNTESI Safety Shut Off Valves Specifications	
Min Operating Pressure	3 bar [43 psi]
Max Operating Pressure	10 bar [145 psi]
Operating Temperature	-10 to 50 °C [+14 to +122 °F] @ 10 bar Note: The dew point must be at least 10 °C lower than the fluid temperature
Wall Fixing Screws	(2) M5 Screws (not supplied)
Coils	22mm and 30mm side, 8mm diameter hole - EN 175301-8903 connection, Type B
Feedback Sensor	M8 inductive prox with tamper-evidence paint
Class of Protection	IP65 with coil and connector mounted
Noise Level	Max 95dBA with silenced relief
Max Coil Ring Nut Torque	1 N•m [0.74 lb•ft]
B10d	10 x 10^6 cycles

Metal Work Pneumatic Safety Shut Off Valves – Single Solenoid				
	5623W703U	**5624W704U**	**5625W705U**	**5626W706U**
Category (according to EN ISO 13849)	2			
PL (according to EN ISO 13849)	Suitable for use in safety circuits up to PLd			
Conductance C [NL/Min * bar]	764	821	828	828
Critical Ratio b [bar/bar]	0.25	0.27	0.36	0.36
Flow Rate at 6.3 Bar Δp 0.5 bar [NL/Min]	2300	2550	2700	2700
Flow Rate at 6.3 Bar Δp 0.5 bar [NL/Min]	3200	3500	3700	3700
Conductance C on Relief [NL/Min * bar]	742			
Critical Ratio b on Relief [bar/bar]	0.09			
Flow Rate on Free Exhaust at 6.3 Bar [NL/Min]	5400			
TRA/TRR at 6.3 Bar [ms/ms]	33/100			

Metal Work Pneumatic Safety Shut Off Valves – Double Solenoid				
	5623W723U	**5624W724U**	**5625W725U**	**5626W726U**
Category (according to EN ISO 13849)	4			
PL (according to EN ISO 13849)	Suitable for use in safety circuits up to PLe			
Conductance C [NL/Min * bar]	557	600	600	600
Critical Ratio b [bar/bar]	0.23	0.24	0.24	0.24
Flow Rate at 6.3 Bar Δp 0.5 bar [NL/Min]	1700	1800	1800	1800
Flow Rate at 6.3 Bar Δp 0.5 bar [NL/Min]	2300	2500	2500	2500
Conductance C on Relief [NL/Min * bar]	742			
Critical Ratio b on Relief [bar/bar]	0.09			
Flow Rate on Free Exhaust at 6.3 Bar [NL/Min]	5400			
TRA/TRR at 6.3 Bar [ms/ms]	70/100			

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Metal Work Syntesi Accessories

Item Photo	Part No.	Price	Description	Drawing Link	Manufacturer Specs	Weight (lbs)
	88257E4	$15.00	Metal Work mounting bracket, rear, plated steel. For use with Syntesi Size 2 air prep components. Mounting hardware included.	PDF	PDF	0.30
	9200718X	$18.00	Metal Work DIN rail adapter, anodized aluminum. Package of 2. For use with Syntesi Size 1 and 2 air prep components. Mounting hardware included.	PDF	PDF	0.20
	88257E6	$6.75	Metal Work connector nipple, anodized aluminum. For use with Syntesi Size 2 air prep components. Mounting hardware included.	PDF	PDF	0.20
	88257E8	$6.25	Metal Work connector nipple, 90 degree mounting, anodized aluminum. For use with Syntesi Size 2 air prep components. Mounting hardware included.	PDF	PDF	0.20
	88257F4	$5.75	Metal Work port adapter, 3/8in female NPT, anodized aluminum. For use with Syntesi Size 2 air prep components. Mounting hardware included.	PDF	PDF	0.15
	88257F5	$5.75	Metal Work port adapter, 1/2in female NPT, anodized aluminum. For use with Syntesi Size 2 air prep components. Mounting hardware included.	PDF	PDF	0.10
	88257F6	$10.00	Metal Work port adapter, 3/4in female NPT, anodized aluminum. For use with Syntesi Size 2 air prep components. Mounting hardware included.	PDF	PDF	0.10
	88257F7	$10.00	Metal Work port adapter, 1in female NPT, anodized aluminum. For use with Syntesi Size 2 air prep components. Mounting hardware included.	PDF	PDF	0.10
	88257G4	$13.50	Metal Work solenoid coil, 12 VDC, 2W, 11mm DIN style wiring plug. For use with Metal Work valves.	PDF	PDF	0.10
	88257G5	$13.50	Metal Work solenoid coil, 24 VDC, 2W, 11mm DIN style wiring plug. For use with Metal Work valves.	PDF	PDF	0.10
	88257G6	$13.50	Metal Work solenoid coil, 24 VAC, 3.5 VA, 11mm DIN style wiring plug. For use with Metal Work valves.	PDF	PDF	0.10
	88257G7	$13.50	Metal Work solenoid coil, 110 VAC, 3.5 VA, 11mm DIN style wiring plug. For use with Metal Work valves.	PDF	PDF	0.10
	88257G8	$13.50	Metal Work solenoid coil, 240 VAC, 3.5 VA, 11mm DIN style wiring plug. For use with Metal Work valves.	PDF	PDF	0.10