



Basic Package Includes:

	ABRA or TWA Actuators	Straight valve with solder unions
•	24 vac Actuator c/w end switch Low power consumption (2VA) Long, trouble free life Silent operation Compact size for tight installations	 1/2" or 3/4" versions Solder unions for quick installation and removal Compact size Proven performance in millions of installations

Deluxe Package Includes:

Basic package plus 2 Wire Thermostat

- Micro processor PI Control. Optimum control for radiant heating applications
- LED display for set temperature, actual temperature and thermostat status (°F or °C)
- Battery powered with low battery indicator

Ordering Information:

Code No.	Description
TWA4200	1/2" Basic Zone Valve Package
TWA4400	3/4" Basic Zone Valve Package
TWA42RETB	1/2" Deluxe Zone Valve Package
TWA44RETB	3/4" Deluxe Zone Valve Package
ABRA4200	1/2" Basic Zone Valve Package
ABRA4400	3/4" Basic Zone Valve Package
ABRA42RETB	1/2" Deluxe Zone Valve Package
ABRA44RETB	3/4" Deluxe Zone Valve Package

DANFOSS ACTUATORS

- Low Power Consumption (2 VA)
- Operate Silently
- Do Not Cause Water Hammer
- Long Life Cycle
- Easily Installed or Removed

DANFOSS VALVES

- **Proven In Countless** Installations
- Cover A Wide Range of Flow Requirements
- Available In A Variety of Configurations

TOGETHER

They Provide A Cost **Effective Compact** Zone Valve And Can Be Configured To Fit Almost Any Application.

(Mercury Free) **THERMOSTATS**

The Ease of Analog With The **Precision of Microprocessor** PI Control.



Zone Valves

Hydronic Accessories





















Other Products











www.na.heating.danfoss.com



Zone Valves, Injection Valves, Radiant Manifold Control Valves, Constant Flow Valves...

The TWA-actuator is used to All Danfoss actuators are thermoelectrically activate RA-2000, VMT, hydraulic. The slow opening and valve body has a compatible actuator KOVM and RAV valves on hot closing of these units eliminate water allowing you to configure a valve to water heating systems, where slow hammer associated with synchro opening and closing is desirable to type motors. Operation is quiet eliminate water hammer associated through the entire cycle. These units Zone valves, injection valves, radiant with quick acting valves.

low power consumption actuator from the valve for replacement. equipped with a visual indicator to show the open or closed position of Danfoss valves have proven the valve. The actuator can be used themselves in countless operations. For full specifications on Danfoss with RET-B, RET-24, MTC, MTD or They are available in a variety of valve bodies, consult individual data MTW electronic room thermostats. configurations and cover a wide sheets.

provide a long trouble-free life, and The TWA is a low voltage (24 V), if the need arises, are easily removed flow valves can all be created using

range of flow requirements. Each your specific requirements.

manifold control valves and constant a combination of Danfoss valves and actuators.













Type		TWA-A TWA-V		ABNM	AVB	ABRA						
Mounts to valve:		RA 2000 (HW)	All KOVM / Some VMT (HW)	RA 2000 (HW, Steam)	VMT/KOVM (HW)	RA 2000 (HW, Steam)						
Features (All) - Compact size, easy mount Silent operation, long life		- NC - NO - NC with end switch	- NC - NO - Visual status indicator	- Modulating for use in 0 - 10V DC, DDC systems - Visual status indicator	- Adjustable flow limitation & manual operation	- NC 4 wire actuator with end switch - Visual status indicator						
Voltage		24V AC/DC	24V AC/DC	24V AC	24V AC	24V AC						
Power Consumption		2 VA	2 VA	1.5 VA	9 VA	2 VA						
Max. Ambient Temp.		140 °F (60 °C)	140 °F (60 °C)	140 °F (60 °C)	140 °F (60 °C)	140 °F (60 °C)						
	NC	088H3110	088H3120	082F1091	082F0052	N/A						
Code No.:	NO	088H3111	088H3121	N/A	082F0002	N/A						
	NC + end switch	088H3114	N/A	N/A	N/A	082F1085						
Max. Dia		1 19/32"	1 19/32"	2 3/32"	2 3/4"	2 3/32"						
ard Connections		* Compatibility										

			IVIAX. DIA			1 19/32			1 19/32		2 3/32 2 3/4							2 3/32	
Code No.	Description	CV Valve	Standard Connections			* Compatibility													
			Inlet	Outlet	L1	L2	Н				L1	L2	Н	L1	L2	Н	L1	L2	Н
013G8042	1/2" Solder Union Straight Valve Body	1.60	Solder Union	Solder Union	2 5/8"	3 15/16"	3 3/4"	-	-	-	2 5/8"	3 15/16"	3 7/16"	-	-	-	2 5/8"	3 15/16"	3 5/8"
013G8044	3/4" Solder Union Straight Valve Body	2.70	Solder Union	Solder Union	2 15/16"	4 5/8"	3 7/8"	-	-	-	2 15/16"	4 5/8"	3 5/8"	-	-	-	2 15/16"	4 5/8"	3 7/8"
								L1	L2	Н				L1	L2	Н			
065F0102	1/2" Straight Union Solder	1.60	Solder Union	Solder Union	-	-	-	2 5/8"	3 15/16"	3 9/16"	-	-	-	2 5/8"	3 15/16"	4 3/8"	-	-	-
065F0104	3/4" Straight Union Solder	2.70	Solder Union	Solder Union	-	-	-	2 5/16"	4 5/8"	3 5/8"	-	-	-	2 5/16"	4 5/8"	4 3/8"	-	-	-
065F8960	1/2" Straight Union Solder	3.30	Solder Union	Solder Union	-	-	-	-	-	-	-	-	-	2 5/8"	3 15/16"	4 17/32"	-	-	-
065F8961	3/4" Straight Union Solder	5.90	Solder Union	Solder Union	-	-	-	-	-	-	-	-	-	2 5/16"	4 5/8"	4 5/8"	-	-	-
065F1242	1" Straight Union Male, NPT	9.40	NPT Tail piece	NPT Tail piece	-	-	-	-	-	-	-	-	-	3 17/32"	6 13/32"	4 7/8"	-	-	-
					L1	L2	Н				L1	L2	Н				L1	L2	Н
013G8015	1/2" NPT Straight valve body	1.60	FNPT	NPT Tail piece	2 5/8"	3 3/4"	3 3/4"	-	-	-	2 5/8"	3 3/4"	3 7/16"	-	-	-	2 5/8"	3 3/4"	3 5/8"
013G8020	3/4" NPT Straight valve body	2.70	FNPT	NPT Tail piece	2 29/32"	4 3/16"	3 7/8"	-	-	-	2 29/32"	4 3/16"	3 5/8"	-	-	-	2 29/32"	4 3/16"	3 7/8"
013G8025	1" NPT Straight valve body	2.80	FNPT	NPT Tail piece	3 17/32"	4 31/32"	3 7/8"	-	-	-	3 17/32"	4 31/32"	3 5/8"	-	-	-	3 17/32"	4 31/32"	3 7/8"
013G8032	1-1/4" NPT Straight valve body	2.80	FNPT	NPT Tail piece	4 1/4"	5 9/32"	4"	-	-	-	4 1/4"	5 9/32"	3 23/32"	-	-	-	4 1/4"	5 9/32"	4"
013G8013	1/2" NPT Side Mount Angle valve body	1.60	FNPT	NPT Tail piece	1 1/8"	2 1/4"	4 1/4"	-	-	-	1 1/8"	2 1/4"	3 15/16"	-	-	-	1 1/8"	2 1/4"	4 1/4"
013G8018	3/4" NPT Side Mount Angle valve body	2.10	FNPT	NPT Tail piece	1 11/32"	2 5/8"	4 1/4"	-	-	-	1 11/32"	2 5/8"	4"	-	-	-	1 11/32"	2 5/8"	4 1/4"
013G8023	1" NPT Side Mount Angle valve body	2.80	FNPT	NPT Tail piece	1 9/16"	3"	4 1/4"	-	-	-	1 9/16"	3"	4"	-	-	-	1 9/16"	3"	4 1/4"
013G8030	1-1/4" NPT Side Mount Angle valve body	2.80	FNPT	NPT Tail piece	1 3/4"	3 3/8"	4 1/4"	-	-	-	1 3/4"	3 3/8"	4"	-	-	-	1 3/4"	3 3/8"	4 1/4"
013G8014	1/2" NPT Angle valve body	1.60	FNPT	NPT Tail piece	1 3/16"	2 9/32"	3 3/4"	-	-	-	1 3/16"	2 9/32"	3 7/16"	-	-	-	1 3/16"	2 9/32"	3 5/8"
013G8019	3/4" NPT Angle valve body	2.70	FNPT	NPT Tail piece	1 11/32"	2 5/8"	3 7/8"	-	-	-	1 11/32"	2 5/8"	3 5/8"	-	-	-	1 11/32"	2 5/8"	3 7/8"
013G8024	1" NPT Angle valve body	2.80	FNPT	NPT Tail piece	1 9/16"	3"	3 7/8"	-	-	-	1 9/16"	3"	3 5/8"	-	-	-	1 9/16"	3"	3 7/8"
013G8031	1-1/4" NPT Angle valve body	2.80	FNPT	NPT Tail piece	1 3/4"	3 3/8"	3 7/8"	-	-	-	1 3/4"	3 3/8"	3 5/8"	-	-	-	1 3/4"	3 3/8"	3 7/8"
								L1	L2	н									
013U3017	KOVM 1/2" NPT valve body	1.75	FNPT	FNPT	-	-	-	1 3/32"	3 7/32"	4 5/8"	-	-	-	-	-	-	-	-	-
013U3015	KOVM 1/2" valve body, Compression Fittings	1.75	1/2" OD compression	1/2" OD compression	-	-	-	1 3/32"	3 7/32"	4 5/8"	-	-	-	-	-	-	-	-	-
013U3020	KOVM 1/2" valve body, Compression Fittings	2.34	1/2" OD compression	1/2" OD compression	-	-	-	1 3/32"	3 7/32"	4 5/8"	-	-	-	-	-	-	-	-	-
	013G8042 013G8044 065F0102 065F0104 065F8960 065F8961 065F1242 013G8015 013G8025 013G8032 013G8013 013G8018 013G8018 013G8019 013G8019 013G8019 013G8019	1/2" Solder Union Straight Valve Body 3/4" Solder Union Straight Valve Body 13G8044 3/4" Solder Union Straight Valve Body 165F0102 1/2" Straight Union Solder 165F0104 3/4" Straight Union Solder 165F8960 1/2" Straight Union Solder 165F8961 3/4" Straight Union Solder 17" Straight Union Male, NPT 17" NPT Straight Valve body 13G8015 1/2" NPT Straight valve body 13G8020 3/4" NPT Straight valve body 13G8032 1-1/4" NPT Straight valve body 13G8013 1/2" NPT Side Mount Angle valve body 13G8018 3/4" NPT Side Mount Angle valve body 13G8023 1" NPT Side Mount Angle valve body 13G8030 1-1/4" NPT Side Mount Angle valve body 13G8030 1-1/4" NPT Side Mount Angle valve body 13G8030 1-1/4" NPT Angle valve body 13G8019 3/4" NPT Angle valve body 13G8031 1-1/4" NPT Angle valve body	Code No. Description Valve 013G8042 1/2" Solder Union Straight Valve Body 1.60 013G8044 3/4" Solder Union Straight Valve Body 2.70 065F0102 1/2" Straight Union Solder 1.60 065F0104 3/4" Straight Union Solder 2.70 065F8960 1/2" Straight Union Solder 3.30 065F8961 3/4" Straight Union Solder 5.90 065F1242 1" Straight Union Male, NPT 9.40 013G8015 1/2" NPT Straight valve body 1.60 013G8020 3/4" NPT Straight valve body 2.80 013G8032 1-1/4" NPT Straight valve body 2.80 013G8013 1/2" NPT Side Mount Angle valve body 2.10 013G8018 3/4" NPT Side Mount Angle valve body 2.80 013G8023 1" NPT Side Mount Angle valve body 2.80 013G8030 1-1/4" NPT Side Mount Angle valve body 2.80 013G8019 3/4" NPT Angle valve body 2.80 013G8019 3/4" NPT Angle valve body 2.80 013G8031 1-1/4" NPT Angle valve body 2.80	Code No. Description CV Valve Inlet 01368042 1/2"Solder Union Straight Valve Body 1.60 Solder Union 01368044 3/4"Solder Union Straight Valve Body 2.70 Solder Union 065F0102 1/2"Straight Union Solder 1.60 Solder Union 065F0104 3/4"Straight Union Solder 2.70 Solder Union 065F8960 1/2"Straight Union Solder 3.30 Solder Union 065F8961 3/4"Straight Union Solder 5.90 Solder Union 065F1242 1"Straight Union Male, NPT 9.40 NPT Tail piece 013G8015 1/2"NPT Straight valve body 1.60 FNPT 013G8020 3/4"NPT Straight valve body 2.70 FNPT 013G8032 1-1/4"NPT Straight valve body 2.80 FNPT 013G8013 1/2"NPT Side Mount Angle valve body 1.60 FNPT 013G8013 1/2"NPT Side Mount Angle valve body 2.80 FNPT 013G8013 1/2"NPT Side Mount Angle valve body 2.80 FNPT 013G8013 1-1/4"NPT Side Mount Angle valve body </td <td> Code No. Description CV Valve Inlet Outlet </td> <td> Code No. Description CV Valve Inlet Outlet L1 </td> <td> Code No. Description CV Valve Inlet Outlet L1 L2 </td> <td> Code No. Description CV Valve Inlet Outlet L1 L2 H </td> <td> Code No. Description CV Valve Inlet Outlet L1 L2 H </td> <td> Code No. Description Code No. Description Code No. Inlet Outlet L1 L2 H </td> <td> Code No. Description Des</td> <td> Code No. Description Des</td> <td> Code No. Description Des</td> <td> Code No. Description Part First Part Pa</td> <td> Code No. Poscription Pos</td> <td> Standard Code No. Description Policy Description Description </td> <td> Code No. Description CV Standard Content Outlet Outlet</td> <td> Code No. Description Cy Mark Mile Courte Li L2 M L1 L2 M L1</td> <td> Standard Part Standard Part Standard Standa</td>	Code No. Description CV Valve Inlet Outlet	Code No. Description CV Valve Inlet Outlet L1	Code No. Description CV Valve Inlet Outlet L1 L2	Code No. Description CV Valve Inlet Outlet L1 L2 H	Code No. Description CV Valve Inlet Outlet L1 L2 H	Code No. Description Code No. Description Code No. Inlet Outlet L1 L2 H	Code No. Description Des	Code No. Description Des	Code No. Description Des	Code No. Description Part First Part Pa	Code No. Poscription Pos	Standard Code No. Description Policy Description Description	Code No. Description CV Standard Content Outlet Outlet	Code No. Description Cy Mark Mile Courte Li L2 M L1 L2 M L1	Standard Part Standard Part Standard Standa

^{*} Actuator can only be used with corresponding valve body where dimensions are indicated

