

ENGINEERING TOMORROW

**H-Series Motorised Valves** 

## Shoe and Paddle Type all valves are built for top performance

- Available in 2-port, 3-port diverter and 3-port mid-position versions
- Interchangeable actuators
- Available as separate valve bodies and actuators or in convenient sets
- For ease of installation and serviceability, actuators are fitted to the valve bodies on site at time of installation
- Wide range of valve body sizes





## **Motorised Control Valves H-Series - Shoe Type**

## Motorised Control Valves **H-Series - Paddle Type**





- Available in 2-port, 3-port diverter and 3-port mid-position versions
- Wide range of valve body sizes
- Interchangeable actuators

For central heating and hot water circulation in wet domestic central heating systems.

H-series 'shoe' valves are available in 2-port and 3-port versions in a wide range of sizes for both copper and iron pipework. Actuators for mid-position, diverter and 2-port on/off applications complete the range.

Valve bodies and actuators may be purchased separately or in convenient sets. For ease of installation and serviceability, assembly of the actuator to the valve body is made on site, using the screws provided.

The high capacity bodies incorporate two self-cleaning positive shut-off shoes. Flow through the 2-port valves can be in either direction.

The spring return actuators have auxiliary switches and one metre of cable with industry standard wire colours. A lever enables the valves to be opened manually, useful when filling the system.

Danfoss valve actuators are designed for direct in-service replacement of actuators on other makes of motorised valves (see compatibility chart).



3-Port Shoe Valves (Spring Re	turn to Heatin	g Closed) (4)				
		Complete Valve Body & Actuator Valve Body On				
Valve Size and Connection Details	Mid	Mid Position <sup>(1)</sup>		Diverter <sup>(2)</sup>		C. J. N.
	Туре	Code No	Туре	Code No	Туре	Code No
22mm (ext. compression)	HS3	087N661300	HS3D	087N661400	HSV3	087N659900

Notes: (1) Includes HSA3 Actuator (2) Includes HSA3D Actuator

Valve Size and		Complete Valve Body & Actuator		Actuator Only		Valve Body Only	
Connection Details	Туре	Code No	Туре	Code No	Туре	Code No	
22mm (ext. compression)	HP22	087N660900	HPA2	087N657900	HPV22	087N659700	
28mm (ext. compression)	HP28	087N661100	HPA2	087N657900	HPV28	087N659800	
28mm (ext. compression)	HP28C <sup>(3)</sup>	087N661200	HPA2C	087N658000	HPV28	087N659800	
15mm (int. compression)	HP15	087N660800	HPA2	087N657900	HPV15	087N659600	
3/4" BSP (female)	HP0.75	087N660200	HPA2	087N657900	HPV0.75	087N659400	
1"BSP (female)	HP1.0	087N660400	HPA2	087N657900	HPV1.0	087N659500	

Notes: (3) For Gravity Hot Water Systems

Motorised Valve Actuators						
Description	Code No	Туре	Voltage	Aux. Switch Detail		
3-Port Mid-Position Valve Actuator	087N658700	HSA3	230 Vac ±15%	SPST <sup>(4)</sup>		
3-Port Diverter Valve Actuator	087N658900	HSA3D	230 Vac ±15%	SPST Aux. Sw.		
2-Port Valve Actuator (normally closed)	087N657900	HPA2	230 Vac ±15%	SPST (volt free)		
2-Port Valve Actuator (normally closed)	087N658000	HPA2C	230 Vac ±15%	SPDT Aux. Sw.		

Notes (4) Linked Internally

(5) Max flow temp 95°C, max working pressure 10 bar, max differential pressure 15mm, 22mm, 1/2" & 3/4" = 1.0 bar; 28mm & 1" = 0.7bar

Compatibility Chart Danfoss Actuators & Valve Bodies are interchangeable with other makes							
Danfoss Code	Landis & Gyr (ext.)	Landis & Gyr (int.)	Pegler Sunvic	Potterton			
HSA3 Actuator	SK3	SK3	SD1701/2701	PMV3			
HSV3 Valve - 22mm	LT8322	LT2701 <sup>(6)</sup>	EDT1702	PMV3			
HPA2 Actuator	SK2	SK2	SZ1301/2301	PMV2			
HPV22 - 22mm	LL8222	LL4453 <sup>(6)</sup>	EML3454	PMV2			
HPV28 - 28mm	-	33 4501	EML3503	-			

Notes: (6) These references are for older types of L&G valve bodies, having internal compression fittings - some pipework change will be required.

		<b>Complete Valve</b>	Valve Body Only				
Valve Size and Connection Details	Mid Position <sup>(1)</sup>		Diverter (2)		_		
Connection Details	Type Code No		Type Code No		Туре	Code No	
22mm (ext. compression)	HS3B	087N664600	HS3DB22	087N665300	HSV3B22	087N662500	
28mm (ext. compression)	HS3B28	087N665100	HS3DB28	087N666000	HSV3B28	087N663000	
15mm/1/2" BSP (int. compression)	HS3B15	087N665000	HS3DB15	087N665900	HSV3B15	087N662900	
3/4" BSP (female)	HS3B0.75	087N664800	HS3DB0.75	087N665400	HSV3B0.75	087N662600	
1" BSP (female)	HS3B1.0	087N664900	HS3DB1.0	087N665800	HSV3B1.0	087N662800	

(1) Includes HSA3 Actuator (2) Includes HSA3D Actuator

2-Port Paddle Valves (Spring Return to Closed) <sup>(4)</sup>								
Valve Size and	Complete Valve Body & Actuator		Actuator Only		Valve Body Only			
Connection Details	Туре	Code No	Туре	Code No	Туре	Code No		
22mm (ext. compression)	HP22B	087N664200	HPA2	087N657900	HPV22B	087N662200		
28mm (ext. compression)	HP28B	087N664400	HPA2	087N657900	HPV28B	087N662400		
28mm (ext. compression)	HP28BC <sup>(3)</sup>	087N664500	HPA2C	087N658000	HPV28B	087N662400		
15mm/1/2" BSP (int. compression)	HP15B	087N664000	HPA2	087N657900	HPV15B	087N662100		
3/4" BSP (female)	HP0.75B	087N663400	HPA2	087N657900	HPV0.75B	087N661800		
1"BSP (female)	HP1.0B	087N663700	HPA2	087N657900	HPV1.0B	087N662000		
Notes:								

(3) For Gravity Hot Water Systems

(4) Max flow temperature 95°C, max working pressure 10 bar, max differential pressure 15mm, 22mm, 1/2" & 3/4" = 1.0 bar; 28mm & 1" = 0.7bar

Motorised Valve Actuators							
Description	Code No	Туре	Voltage				
3-Port Mid-Position Valve Actuator	087N658700	HSA3	230Vac ±15%				
3-Port Diverter Valve Actuator	087N658900	HSA3D	230Vac ±15%				
2-Port Valve Actuator (normally closed)	087N657900	HPA2	230Vac ±15%				
2-Port Valve Actuator (normally closed)	087N658000	HPA2C	230Vac ±15%				
Notes: (5) Linked Internally							

Aux. Switch Detail	
SPST <sup>(5)</sup>	
SPST Aux. Sw.	
SPST (volt free)	
SPDT Aux. Sw.	

- Available in 2-port, 3-port diverter and 3-port mid-position versions
- Wide range of valve body sizes
- Interchangeable actuators

For central heating and hot water circulation in wet domestic central heating systems.

H-series 'paddle' valves are available in 2-port and 3-port versions in a wide range of sizes for both copper and iron pipework. All valves offer 100% tight shut-off. Actuators for mid-position, diverter and 2-port on/off applications complete the range.

Valve bodies and actuators may be purchased separately or in convenient sets.

For ease of installation and serviceability, assembly of the actuator to the valve body is made on site, using the screws provided.

The spring return actuators have auxiliary switches and one metre of cable with industry standard wire colours. A lever enables the valves to be opened manually, useful when filling the system.

Danfoss valve actuators are designed for direct in-service replacement of actuators on other makes of motorised valves (see compatibility chart).





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