



		NON-SPRING RETURN				ELECTRONIC FAIL-SAFE		SPRING RETURN
PROGRAMMING TOOLS		AM/AR	GM/GR	DR	SY	DK	GK	AF
	<b>MFT-P</b> Belimo MFT configuration software (V3.X) Includes: PC-Tool software (interface cables [ZTH US] not included)	•	•	•	•	•	•	•
INTERFACES, CABLES								
	<b>ZTH US</b> Handheld interface module that allows field programming	•	•	•	•	•	•	•
	<b>ZK1-GEN</b> Cable for use with ZTH US to connect to new generation non-spring return actuator via diagnostic/programming socket	•	•	•		•	•	
	<b>ZK2-GEN</b> Cable for use with ZTH US to connect with spring return and non-spring return actuators not equipped with diagnostic/programming socket	•	•					
	<b>ZK6-GEN</b> Cable for use with ZTH US to connect to SY actuator via RJ11 port				•			

		NON-SPRING RETURN		
BATTERY BACKUP		AM/AR	GM/GR/DR	SY
	<b>NSV24 US</b> Battery backup module	•	•	
	<b>NSV-BAT</b> 12VDC 1.2 AH battery (2 required)	•	•	
	<b>EXT-NSV-B01-120</b> Battery backup system, SY1 - SY3 120 VAC, on/off actuators			•
	<b>EXT-NSV-B02-120</b> Battery backup system, SY1 - SY3 120 VAC, MFT actuators			•
	<b>EXT-NSV-B03-120</b> Battery backup system, SY4 - SY6 120 VAC, on/off actuators			•
	<b>EXT-NSV-B04-120</b> Battery backup system, SY4 - SY6 120 VAC, MFT actuators			•
	<b>EXT-NSV-B05-120</b> Battery backup system, SY7 - SY12 120 VAC, on/off actuators			•
	<b>EXT-NSV-B06-120</b> Battery backup system, SY7 - SY12 120 VAC, MFT actuators			•
	<b>EXT-NSV-B11-24</b> Battery backup system, SY1 24 VAC, on/off actuators			•
	<b>EXT-NSV-B12-24</b> Battery backup system, SY1 24 VAC, MFT actuators			•
	<b>EXT-NSV-B13-24</b> Battery backup system, SY2 - SY5 24 VAC, on/off actuators			•
	<b>EXT-NSV-B14-24</b> Battery backup system, SY2 - SY5 24 VAC, MFT actuators			•
	<b>EXT-NSV-B21-230</b> Battery backup system, SY1 - SY3 230 VAC, on/off actuators			•
	<b>EXT-NSV-B22-230</b> Battery backup system, SY1 - SY3 230 VAC, MFT actuators			•
	<b>EXT-NSV-B23-230</b> Battery backup system, SY4 - SY6 230 VAC, on/off actuators			•
	<b>EXT-NSV-B24-230</b> Battery backup system, SY4 - SY6 230 VAC, MFT actuators			•
	<b>EXT-NSV-B25-230</b> Battery backup system, SY7 - SY12 230 VAC, on/off actuators			•
	<b>EXT-NSV-B26-230</b> Battery backup system, SY7 - SY12 230 VAC, MFT actuators			•

# Valve Accessories

## Butterfly Valves



WEATHER SHIELDS	NON-SPRING RETURN ACTUATORS				ELECTRONIC FAIL-SAFE	SPRING RETURN ACTUATORS
	AM	GM/GR	DR	SY		
	<b>ZS-BFV-20*</b> GM series for F6, F7 HD, HDU, VIC		•	•		•
	<b>ZS-BFV-30*</b> AF series for F6, F7 HD, HDU, VIC					•
	<b>ZS-BFV-60*</b> Dual GM series for F6 HD, HDU (4" - 6"), VIC		•			
	<b>ZS-BFV-70*</b> Dual AF series for F6 HD, HDU (2½" - 3"), VIC					•
	<b>ZS-BFV-80*</b> Dual AF series for F6 HD, HDU (4", 5"), VIC					•
	<b>ZS-BFV-90*</b> Dual AF/GM series for F7 HD, HDU below 4" (specify valve size), VIC		•			•
ELECTRIC DISCONNECT						
	<b>HOA-120V</b> Local electric disconnect SY2-SY12; 2 position - 110/230V				•	
	<b>HOA-120VMFT</b> Local electric disconnect SY2-SY12; modulating - 110/230V				•	
	<b>HOA-24V</b> Local electric disconnect SY2-SY12; 2 position - 24V				•	
	<b>HOA-24VMFT</b> Local electric disconnect SY2-SY12; modulating - 24V				•	
AUXILIARY SWITCHES & POTENTIOMETERS						
	<b>SY-1000-FB01</b> 1000 Ω feedback potentiometer. 2 Position, factory installed option only				•	
	<b>SY-1000-FB02</b> 1000 Ω feedback potentiometer. Modulating, factory installed option only (modulating models SYx...-P, -SR or -MFT)				•	
	<b>S1A</b> Auxiliary switch - 1x SPDT, 3A (0.5A inductive) @ 250 VAC	•	•	•		
	<b>S2A</b> Auxiliary switch - 2x SPDT, 3A (0.5A inductive) @ 250 VAC	•	•	•		
	<b>P140A GR</b> Feedback potentiometer 140 Ω	•	•	•		
	<b>P500A GR</b> Feedback potentiometer 500 Ω	•	•	•		
	<b>P1000A GR</b> Feedback potentiometer 1000 Ω	•	•	•		
	<b>P2800A GR</b> Feedback potentiometer 2800 Ω	•	•	•		
	<b>P5000A GR</b> Feedback potentiometer 5000 Ω	•	•	•		
	<b>P10000A GR</b> Feedback potentiometer 10000 Ω	•	•	•		
HOUSING						
	<b>ZS-T</b> Terminal cover for NEMA 2 (-T models)				•	

\*Cannot be used with direct mount actuators.

**MANUAL HANDLES**


		VALVE
		HDU/HD
	<b>F650HD+HND01</b> 2" HD series valve with manual handle ductile iron, 200 psi close-off, C <sub>v</sub> 115	•
	<b>F665HD+HND01</b> 2½" HD series valve with manual handle ductile iron, 200 psi close-off, C <sub>v</sub> 196	•
	<b>F680HD+HND01</b> 3" HD series valve with manual handle ductile iron, 200 psi close-off, C <sub>v</sub> 302	•
	<b>F6100HD+HND02</b> 4" HD series valve with manual handle ductile iron, 200 psi close-off, C <sub>v</sub> 600	•
	<b>F6125HD+HND02</b> 5" HD series valve with manual handle ductile iron, 200 psi close-off, C <sub>v</sub> 1022	•
	<b>F6150HD+HND02</b> 6" HD series valve with manual handle ductile iron, 200 psi close-off, C <sub>v</sub> 1579	•

**GEAR OPERATORS**


	<b>F650HD+GW01</b> 2" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 115	•
	<b>F665HD+GW01</b> 2½" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 196	•
	<b>F680HD+GW01</b> 3" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 302	•
	<b>F6100HD+GW02</b> 4" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 600	•
	<b>F6125HD+GW02</b> 5" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 1022	•
	<b>F6150HD+GW02</b> 6" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 1579	•
	<b>F6200HD+GW03</b> 8" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 3136	•
	<b>F6250HD+GW04</b> 10" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 5340	•
	<b>F6300HD+GW04</b> 12" HD series valve with manual gear operator ductile iron, 200 psi close-off, C <sub>v</sub> 8250	•
	<b>F6350HD+GW04</b> 14" HD series valve with manual gear operator ductile iron, 150 psi close-off, C <sub>v</sub> 11917	•
	<b>F6400HD+GW05</b> 16" HD series valve with manual gear operator ductile iron, 150 psi close-off, C <sub>v</sub> 16388	•
	<b>F6450HD+GW06</b> 18" HD series valve with manual gear operator ductile iron, 150 psi close-off, C <sub>v</sub> 21705	•
	<b>F6500HD+GW07</b> 20" HD series valve with manual gear operator ductile iron, 150 psi close-off, C <sub>v</sub> 27908	•
	<b>F6600HD+GW08</b> 24" HD series valve with manual gear operator ductile iron, 150 psi close-off, C <sub>v</sub> 43116	•
	<b>F6750HD+GW09</b> 30" HD series valve with manual gear operator ductile iron, 150 psi close-off, C <sub>v</sub> 73426	•

# Valve Accessories

## Butterfly Valves



MANUAL HANDLES		VALVE 150SHP
	<b>F650-150SHP+HND05</b> 2" SHP series valve with manual handle cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 102	•
	<b>F665-150SHP+HND05</b> 2½" SHP series valve with manual handle cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 146	•
	<b>F680-150SHP+HND06</b> 3" SHP series valve with manual handle cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 228	•
	<b>F6100-150SHP+HND06</b> 4" SHP series valve with manual handle cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 451	•
	<b>F6125-150SHP+HND07</b> 5" SHP series valve with manual handle cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 714	•
	<b>F6150-150SHP+HND07</b> 6" SHP series valve with manual handle cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 1103	•
	<b>F6200-150SHP+HND08</b> 8" SHP series valve with manual handle cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 2064	•
	GEAR OPERATORS	
	<b>F650-150SHP+GW10</b> 2" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 102	•
	<b>F665-150SHP+GW10</b> 2½" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 146	•
	<b>F680-150SHP+GW11</b> 3" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 228	•
	<b>F6100-150SHP+GW11</b> 4" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 451	•
	<b>F6125-150SHP+GW12</b> 5" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 714	•
	<b>F6150-150SHP+GW12</b> 6" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 1103	•
	<b>F6200-150SHP+GW13</b> 8" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 2064	•
	<b>F6250-150SHP+GW15</b> 10" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 3517	•
	<b>F6300-150SHP+GW17</b> 12" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 4837	•
	<b>F6350-150SHP+GW19</b> 14" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 6857	•
	<b>F6400-150SHP+GW21</b> 16" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 9287	•
	<b>F6450-150SHP+GW23</b> 18" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 11500	•
	<b>F6500-150SHP+GW25</b> 20" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 14420	•
	<b>F6600-150SHP+GW27</b> 24" SHP series valve with manual gear operator cast steel, ANSI 150 close-off limitations, C <sub>V</sub> 22050	•

MANUAL HANDLES		VALVE
	<b>F650-300SHP+HND05</b> 2" SHP series valve with manual handle cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 100	•
	<b>F665-300SHP+HND05</b> 2½" SHP series valve with manual handle cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 143	•
	<b>F680-300SHP+HND06</b> 3" SHP series valve with manual handle cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 223	•
	<b>F6100-300SHP+HND06</b> 4" SHP series valve with manual handle cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 435	•
	<b>F6125-300SHP+HND07</b> 5" SHP series valve with manual handle cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 688	•
	<b>F6150-300SHP+HND08</b> 6" SHP series valve with manual handle cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 1041	•
GEAR OPERATORS		
	<b>F650-300SHP+GW10</b> 2" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 100	•
	<b>F665-300SHP+GW10</b> 2½" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 143	•
	<b>F680-300SHP+GW11</b> 3" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 223	•
	<b>F6100-300SHP+GW11</b> 4" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 435	•
	<b>F6125-300SHP+GW12</b> 5" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 688	•
	<b>F6150-300SHP+GW13</b> 6" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 1041	•
	<b>F6200-300SHP+GW14</b> 8" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 1911	•
	<b>F6250-300SHP+GW16</b> 10" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 3194	•
	<b>F6300-300SHP+GW18</b> 12" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 4428	•
	<b>F6350-300SHP+GW20</b> 14" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 5702	•
	<b>F6400-300SHP+GW22</b> 16" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 8243	•
	<b>F6450-300SHP+GW24</b> 18" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 9712	•
	<b>F6500-300SHP+GW26</b> 20" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 10658	•
	<b>F6600-300SHP+GW28</b> 24" SHP series valve with manual gear operator cast steel, ANSI 300 close-off limitations, C <sub>v</sub> 16205	•