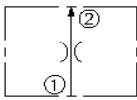
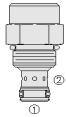


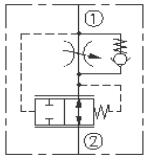
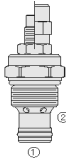
HYDRAFORCE CARTRIDGE QUICK REFERENCE

Flow Regulators, Pressure-Compensated, Fixed Setting



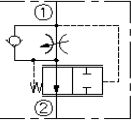
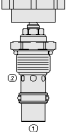
Cartridge Size	Flow	Line Body				Seals
FR08-20F-6T-N-/*	7.5 lpm / 2 gpm	6T	Alum.	7024660	9/16" UNF	N = Buna N
FR10-20F-8T-N-/*	22.7 lpm / 6 gpm	8T	Alum.	7024280	3/4" UNF	N = Buna N
FR50-20F-8TD-P-/*	22.7 lpm / 6 gpm	8TD	Duct. Iron	7151410	3/4" UNF	P = Polyurethane
FR12-20F-10T-N-/*	56 lpm / 15 gpm	10T	Alum.	7022240	7/8" UNF	N = Buna N
FR16-20F-12T-N-/*	113 lpm / 30 gpm	12T	Alum.	7023230	1-1/16" UNF	N = Buna N
Flow Rate (* select a flow rate)						
M1.8 = 1.8lpm	M5.0 = 5.0lpm	1.3 = 1.3gpm	2.0 = 2.0gpm	D030 = 0.030" in Control Orifice		
M1.8 = 1.8lpm	M5.0 = 5.0lpm	1.3 = 1.3gpm	2.0 = 2.0gpm	D030 = 0.030" in Control Orifice		
M5.5 = 5.5lpm	M20.0 = 20.0lpm	1.5 = 1.5gpm	5.0 = 5.0gpm	D094 = 0.094" in Control Orifice		
M5.5 = 5.5lpm	M38.0 = 38.0lpm	1.5 = 1.5gpm	10.0 = 10.0gpm	D094 = 0.094" in Control Orifice		
M4.0 = 4.0lpm	M12.0 = 12.0lpm	5.0 = 5.0gpm	13.0 = 13.0gpm	D030 = 0.030" in Control Orifice		

Flow Regulators, Restrictive, Adjustable, Pressure Compensated



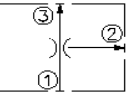
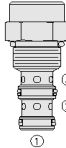
Cartridge Size	Flow	Line Body				Seals
FR50-23*-8T-N-/**	11.5 lpm / 3 gpm	8T	Alum.	7024280	3/4" UNF	N = Buna N
FR50-28*-8T-N-/**	34 lpm / 9 gpm	8T	Alum.	7024280	3/4" UNF	N = Buna N
Adjustment Option (* select an option)						
A = Allen Key	C = A with Cover Cap					
A = Allen Key	C = A with Cover Cap					
Flow Rate (** select a flow rate)						
Blank = 1.5-2.0gpm	1.5 = 1.5gpm	M10 = 10lpm				
Blank = 1.5-2.0gpm	5.5 = 5.5gpm	M20 = 20lpm				

Flow Regulators, Restrictive, Adjustable Orifice



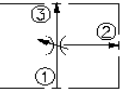
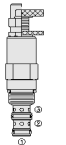
Cartridge Size	Flow	Line Body				Seals
FR12-23*-10T-N-/**	76 lpm / 20 gpm	10T	Alum.	7022240	7/8" UNF	N = Buna N
Adjustment Option (* select an option)						
Blank = Extended Shaft Or A = Allen Key	C = A with Cover Cap	E = Plastic Knob				
Flow Rate (** select a flow rate)						
Blank = 1.5-2.0gpm	5.0 = 5.0gpm	10.0 = 10.0gpm	M4.0 = 4.0lpm	M20.0 = 20.0lpm		

Flow Regulators, Pressure Compensated, Priority Bypass, Fixed Setting



Cartridge Size	Flow	Line Body				Seals
FR08-30F-6T-N-/*	7.6 lpm / 2 gpm	6T	Alum.	7024760	9/16" UNF	N = Buna N
FR10-30F-8T-N-/*	37 lpm / 10 gpm	8T	Alum.	7024380	3/4" UNF	N = Buna N
FR12-30F-10T-N-/*	94 lpm / 25 gpm	10T	Alum.	7022330	7/8" UNF	N = Buna N
FR16-30F-12T-N-/*	190 lpm / 50 gpm	12T	Alum.	7022650	1-1/16" UNF	N = Buna N
Flow Rate (* select a flow rate)						
M1.8 = 1.8lpm	M5.0 = 5.0lpm	1.3 = 1.3gpm	2.0 = 2.0gpm	D030 = 0.030" in Control Orifice		
M1.8 = 1.8lpm	M5.0 = 5.0lpm	1.3 = 1.3gpm	5.0 = 5.0gpm	D030 = 0.030" in Control Orifice		
M4.0 = 4.0lpm	M8.0 = 8.0lpm	1.5 = 1.5gpm	5.0 = 5.0gpm	D050 = 0.050" in Control Orifice		
M20.0 = 20.0lpm	M100 = 100lpm	15.0 = 15.0gpm	22.0 = 22.0gpm	D150 = 0.150" in Control Orifice		

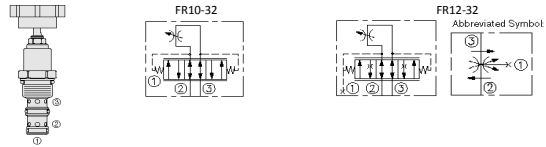
Flow Regulators, Pressure-Compensated, Priority Bypass, Limited Range Adjustment



Cartridge Size	Flow	Line Body				Seals
FR10-30*-8T-N-**	22 lpm / 6 gpm	8T	Alum.	7024380	3/4" UNF	N = Buna N
Adjustment Option (* select an option)						
A = Allen Key	B = Knob					
Flow Rate (** select a flow rate)						
0.5 = 1.42-2.37lpm	1.0 = 2.84-4.73lpm	2.0 = 5.68-9.46lpm	2.5 = 7.08-11.81lpm	3.0 = 8.52-14.19lpm	4.0 = 11.35-18.93lpm	5.0 = 14.19-23.66

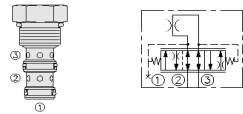
HYDRAFORCE CARTRIDGE QUICK REFERENCE

Flow Regulators, Pressure-Compensated, Adjustable, Bi-Directional



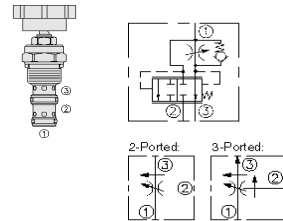
Cartridge Size	Flow	Line Body				Seals
FR10-32*-8T-N-**	19 lpm / 5 gpm	8T	Alum.	7024380	3/4" UNF	N = Buna N
FR12-32*-10T-N	50 lpm / 13 gpm	10T	Alum.	7022330	7/8" UNF	N = Buna N
Adjustment Option (* select an option)						
Blank = Extended Shaft Or	A = Allen Key	C = A with Cover Cap	E = Plastic Knob			
Blank = Extended Shaft Or	A = Allen Key	C = A with Cover Cap	E = Plastic Knob			
Flow Rate (** select a flow rate)						
Blank = 3-4gpm	M2.0 = 2.0lpm	M19.0 = 19.0lpm	0.5 = 0.5gpm	5.0 = 5.0gpm		

Flow Regulators, Fixed Orifice, Bi-Directional



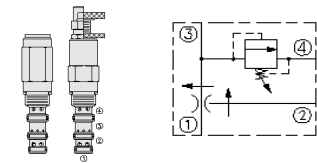
Cartridge Size	Flow	Line Body				Seals
FR10-32F-8T-N-/**	19 lpm / 5 gpm	8T	Alum.	7024380	3/4" UNF	N = Buna N
Flow Rate (** select a flow rate)						
M2.0 = 2.0lpm	M19.0 = 19.0lpm	0.5 = 0.5gpm	5.0 = 5.0gpm			

Flow Control, Bypass, Adjustable Orifice



Cartridge Size	Flow	Line Body				Seals
FR10-33*-8T-N-**	13 lpm / 3 gpm	8T	Alum.	7024380	3/4" UNF	N = Buna N
FR10-39*-8T-N-**	38 lpm / 10 gpm	8T	Alum.	7024380	3/4" UNF	N = Buna N
FR12-33*-10T-N	68 lpm / 18 gpm	10T	Alum.	7022330	7/8" UNF	N = Buna N
Adjustment Option (* select an option)						
Blank = Extended Shaft Or	A = Allen Key	C = A with Cover Cap	E = Plastic Knob			
Blank = Extended Shaft Or	A = Allen Key	C = A with Cover Cap	E = Plastic Knob			
Blank = Extended Shaft Or	A = Allen Key	C = A with Cover Cap	E = Plastic Knob			
Flow Rate (** select a flow rate)						
Blank = 1-2gpm	M1.0 = 1.0lpm	M5.0 = 5.0lpm	0.5 = 0.5gpm	1.5 = 1.5gpm		
Blank = 4-5gpm	M4.0 = 4.0lpm	M12.0 = 12.0lpm	1.5 = 1.5gpm	7.5 = 7.5gpm		

Flow Regulators, Priority-Type With Pressure Relief



Cartridge Size	Flow	Line Body				Seals
FRRV10-41F*-8T-N-**/**	38 lpm / 10 gpm	8T	Alum.	7024480	3/4" UNF	N = Buna N
FRRV12-41F*-10T-N-**/**	76 lpm / 20 gpm	10T	Alum.	7022480	7/8" UNF	N = Buna N
Adjustment Option (* select an option)						
A = Allen Key	B = Knob					
A = Allen Key	B = Knob					
Priority Flow Rate (** select a flow rate)						
Range 1.0-19.0lpm	M12.0 = 12.0lpm	3.0 = 3.0gpm				
Range 1.0-45.4lpm	M20.0 = 20.0lpm	5.0 = 5.0gpm				
Pressure Range (***) Select Pressure Range)						
Blank = Adjustable	M25 = 25bar	M100 = 100bar	9.0 = 9.0PSI	23.5 = 23.5PSI		
Blank = Adjustable	M25 = 25bar	M100 = 100bar	9.0 = 9.0PSI	23.5 = 23.5PSI		