## Chapter 1: Introduction

D	Description	Page
Р	Product index	1-2
4	brands under 1 roof	1-4
S	Systems solutions	1-5

## **Alpha-Numerical Product Index**

Product Series	Description	Page
2F1C	2 Way Variable Flow Control Valve	5-15
4D01	Denison DC Valve	2-7
4D02	Denison DC Valve	2-37
4D02V	Denison Pilot Operated DC Valve	2-59
4D03, 4D06	Denison Pilot Operated DC Valve	2-59
4DP01	Denison Direct Operated Prop. DC Valve	e 3-9
4DP02	Denison Direct Operated Prop. DC Valve	e 3-21
4DP02V	Denison Pilot Operated Prop. DC Valve	3-35
4DP03, 4DP06	Denison Pilot Operated Prop. DC Valve	3-35
4VP01	Denison Direct Operated Prop. Relief Valve, Subplate Mount.	4-43
Α	Subplate	12-8
A102	Subplate	12-12
С	2 Way Slip-In Cartridge Valve	8-5
C*A	2 Way Slip-In Cartridge Valve, Cover w/o Auxiliary Functions	8-8
C*B	2 Way Slip-In Cartridge Valve, Cover w. Stroke Limiter	8-9
C*C	2 Way Slip-In Cartridge Valve, Cover f. Pilot System Mount.	8-11
C*D, C*E	2 Way Slip-In Cartridge Valve, Cover w. Press. Relief Valve	8-14
C, 9C	Check Valve	10-45
C10 D*C	2 Way Slip-In Cartridge Valve	8-95
C18 D*C	2 Way Slip-In Cartridge Valve	8-99
C18 DB	2 Way Slip-In Cartridge Valve	8-103
C1DB	2 Way Cartridge Valve	8-83
C4V	Denison Check Valve	6-15
C4V	Denison Hydr. Pilot Operated Check Valve	6-31
C5P	Denison Pilot Operated Check Valve	9-69
C5V	Denison Direct Operated Check Valve	9-65
СВ	Cartridge Manifold Block	12-33
CE	2 Way Slip-In Cartridge Valve	8-5
CM	Direct Operated Check Valve	7-63
Compax 3F	Servo Drive	11-23
CP, 9CP	Pilot Operated Check Valve	10-47
СРОМ	Pilot Operated Check Valve	7-73
CPS	Pilot Operated Check Valve	6-19
CS	Check Valve	6-9
CS	Sandwich and Cover Plate	12-29
D*1FH	Pilot Operated Prop. DC Valve	3-59
D*1FP	Pilot Operated Servo Prop. DC Valve	3-93
D*1FT	Pilot Operated Prop. DC Valve	3-51
D*1FW	Pilot Operated Prop. DC Valve	3-27
D*1VW	Pilot Operated DC Valve	2-59
D1DL, D3DL	DC Valve	2-87
D1FB	Direct Operated Prop. DC Valve	3-3
D1FP	Direct Operated Prop. DC Valve	3-69
D1FP*S	Direct Operated Prop. DC Valve	3-75
D1FT	Direct Operated Prop. DC Valve	3-45

D1MW         DC Valve         2-31           D1SE         3/2 Way Seated Type DC Valve         2-3           D1VP         Pilot Operated DC Valve         2-75           D1VW         DC Valve         2-75           D1VW         DC Valve, 8 Watt         2-21           D1VW         DC Valve, Explosion Proof         2-27           D3DP         Pilot Operated DC Valve         3-15           D3FB         Direct Operated Prop. DC Valve         3-81           D3FP°0         Direct Operated Prop. DC Valve         3-81           D3FP°3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-37           D3W         DC Valve         2-37           D3W         DC Valve         2-37           D3W         DC Valve         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-75           D4S         Denison Direct Seat Valve         2-75           D4S         Denison Direct Seat Valve         9-36           D4P, D9P, D1-TP         Pilot Operated Press. Relief Valve         4-39           D51*         Cover Plate         12-3           D55	Product Series	Description	Page
D1VP         Pilot Operated DC Valve         2-75           D1VW         DC Valve         2-7           D1VW         DC Valve, 8 Watt         2-15           D1VW         DC Valve, Inductive Pos. Control         2-21           D1VW         DC Valve, Explosion Proof         2-27           D3DP         Pilot Operated DC Valve         3-15           D3FB         Direct Operated Prop. DC Valve         3-81           D3FP'3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-53           D3W         DC Valve         2-53           D3W         DC Valve         2-53           D3W         DC Valve         2-53           D3W         DC Valve         2-59           D4L, D9L         DC Valve         2-67           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         4-39           D51*	D1MW	DC Valve	2-31
D1VW         DC Valve, 8 Watt         2-7           D1VW         DC Valve, 8 Watt         2-15           D1VW         DC Valve, Inductive Pos. Control         2-21           D1VW         DC Valve, Explosion Proof         2-27           D3DP         Pilot Operated DC Valve         2-75           D3FB         Direct Operated Prop. DC Valve         3-81           D3FP'0         Direct Operated Prop. DC Valve         3-87           D3FP'3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-53           D3W         DC Valve         2-53           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-59           D4L, D9L         DC Valve         2-75           D4P, D9P, D11P         Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cove	D1SE	3/2 Way Seated Type DC Valve	2-3
D1VW         DC Valve, BWatt         2-15           D1VW         DC Valve, Inductive Pos. Control         2-21           D1VW         DC Valve, Explosion Proof         2-27           D3DP         Pilot Operated DC Valve         2-75           D3FB         Direct Operated Prop. DC Valve         3-15           D3FP'0         Direct Operated Prop. DC Valve         3-81           D3FP'3         Direct Operated Prop. DC Valve         2-37           D3MW         DC Valve         2-37           D3W         DC Valve         2-53           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-59           D4L, D9L         DC Valve         2-75           D4S         Denison Direct Seat Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D51*	D1VP	Pilot Operated DC Valve	2-75
D1VW         DC Valve, Explosion Proof         2-21           D1VW         DC Valve, Explosion Proof         2-27           D3DP         Pilot Operated DC Valve         2-75           D3FB         Direct Operated Prop. DC Valve         3-15           D3FP*0         Direct Operated Prop. DC Valve         3-81           D3FP*3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-53           D3W         DC Valve         2-37           D3W         DC Valve         2-37           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-59           D4L, D9L         DC Valve         2-75           D4S         Denison Direct Seat Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe M	D1VW	DC Valve	2-7
D1VW         DC Valve, Explosion Proof         2-27           D3DP         Pilot Operated DC Valve         2-75           D3FB         Direct Operated Prop. DC Valve         3-15           D3FP*0         Direct Operated Prop. DC Valve         3-81           D3FP*3         Direct Operated Prop. DC Valve         3-87           D3W         DC Valve         2-53           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4S         Denison Direct Seat Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51**	D1VW	DC Valve, 8 Watt	2-15
D3DP         Pilot Operated DC Valve         2-75           D3FB         Direct Operated Prop. DC Valve         3-15           D3FP*0         Direct Operated Prop. DC Valve         3-81           D3FP*3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-53           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-59           D4L, D9P, D11P Pilot Operated DC Valve         2-75           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Molet.         1-2-1	D1VW	DC Valve, Inductive Pos. Control	2-21
D3FB         Direct Operated Prop. DC Valve         3-81           D3FP*0         Direct Operated Prop. DC Valve         3-81           D3FP*3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-53           D3W         DC Valve         2-37           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Subplate Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           EVSA         Direct Operated Press. Relief	D1VW	DC Valve, Explosion Proof	2-27
D3FP*0         Direct Operated Prop. DC Valve         3-81           D3FP*3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-53           D3W         DC Valve         2-37           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4P, D9P, D11P         Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Seat Valve, Subplate Mount.         6-21           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-M03         Test Unit         11-41           EX	D3DP	Pilot Operated DC Valve	2-75
D3FP*3         Direct Operated Prop. DC Valve         3-87           D3MW         DC Valve         2-53           D3W         DC Valve         2-37           D3W         DC Valve         2-47           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DSDU         Pilot Operated Press. Relief Valve         4-39           DWR*L06         2 Way Prop. Flow Control Valve         5-21           EX-M03         Test Unit         11-41           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7 <td>D3FB</td> <td>Direct Operated Prop. DC Valve</td> <td>3-15</td>	D3FB	Direct Operated Prop. DC Valve	3-15
D3MW         DC Valve         2-53           D3W         DC Valve         2-37           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         9-49           FM         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-7           GFG2         2 Way Flow Control Valve         10-3 <td>D3FP*0</td> <td>Direct Operated Prop. DC Valve</td> <td>3-81</td>	D3FP*0	Direct Operated Prop. DC Valve	3-81
D3MW         DC Valve         2-53           D3W         DC Valve         2-37           D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         9-49           FM         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-7           GFG2         2 Way Flow Control Valve         10-3 <td>D3FP*3</td> <td></td> <td>3-87</td>	D3FP*3		3-87
D3W         DC Valve, Inductive Pos. Control         2-47           D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MV, 9MV         Needle Valve <td< td=""><td>D3MW</td><td><u> </u></td><td>2-53</td></td<>	D3MW	<u> </u>	2-53
D31DW         Pilot Operated DC Valve         2-59           D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Subplate Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MV, 9MV         Needle Valve	D3W	DC Valve	2-37
D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Subplate Mount.         10-27           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-7           GFG2         2 Way Flow Control Valve         5-1           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle V	D3W	DC Valve, Inductive Pos. Control	2-47
D4L, D9L         DC Valve         2-87           D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Subplate Mount.         6-21           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           FSC         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-7           GFG2         2 Way Flow Control Valve         5-1           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         5-3           N, 9N         Needle Valve	D31DW	· · · · · · · · · · · · · · · · · · ·	2-59
D4P, D9P, D11P Pilot Operated DC Valve         2-75           D4S         Denison Direct Seat Valve, Subplate Mount.         6-21           D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           FSC         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-1           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         5-3           N, 9N         Needle Valve         5-5           PADA         Adaptor Plate <td< td=""><td>D4L. D9L</td><td>·</td><td></td></td<>	D4L. D9L	·	
D4SDenison Direct Seat Valve, Subplate Mount.6-21D4SDenison Direct Seat Valve, Pipe Mount.10-27D51*Cover Plate12-31D5SDenison Direct Seat Valve9-35DSDUPilot Operated Press. Relief Valve4-39DUR*L062 Way Prop. Flow Control Valve5-21EVSADirect Operated Press. Relief Valve4-19EX-M03Test Unit11-41EX-N08Power Supply11-39F, 9FThrottle Check Valve10-41F5CDenison Prop. Throttle Valve9-49FMThrottle Check Valve7-49FSThrottle Check Valve5-7GFG22 Way Flow Control Valve5-11H06Sandwich Plate12-25LCMPress. Compensator7-43MSPMulti-Station Manifold12-13MV, 9MVNeedle Valve10-37MVICartridge-Type Needle Valve5-3N, 9NNeedle Valve5-5PADAAdaptor Plate12-23PC*MSFlow Control Valve5-9PCD00A-400E-Module for Prop. Press./Flow Control Valve11-11PC*MPlow Control Valve10-43PE*WPilot Operated Prop. Press.4-109Reducing ValveF-Module for Closed Loop Control11-19PRPilot Operated Press. Reducing Valve7-19			
D4S         Denison Direct Seat Valve, Pipe Mount.         10-27           D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         5-3           N, 9N         Needle Valve         5-3           N, 9N         Needle Valve         5-5           PADA         Adaptor Plate         12-23		Denison Direct Seat Valve,	
D51*         Cover Plate         12-31           D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-1           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9	D4S	•	10-27
D5S         Denison Direct Seat Valve         9-35           DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve		· · · · · · · · · · · · · · · · · · ·	
DSDU         Pilot Operated Press. Relief Valve         4-39           DUR*L06         2 Way Prop. Flow Control Valve         5-21           EVSA         Direct Operated Press. Relief Valve         4-19           EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         10-43           PE*W         Pilot Operated Press. Reducing Valve		Denison Direct Seat Valve	
DUR*L06 2 Way Prop. Flow Control Valve 5-21  EVSA Direct Operated Press. Relief Valve 4-19  EX-M03 Test Unit 11-41  EX-N08 Power Supply 11-39  F, 9F Throttle Check Valve 10-41  F5C Denison Prop. Throttle Valve 9-49  FM Throttle Check Valve 5-7  GFG2 2 Way Flow Control Valve 5-11  H06 Sandwich Plate 12-25  LCM Press. Compensator 7-43  MSP Multi-Station Manifold 12-13  MV, 9MV Needle Valve 10-37  MVI Cartridge-Type Needle Valve 5-3  N, 9N Needle Valve 5-5  PADA Adaptor Plate 12-23  PC*MS Flow Control Valve 5-9  PCD00A-400 E-Module for Prop. Press./Flow Control Valve  PCM, 9PCM Flow Control Valve 10-43  PE*W Pilot Operated Prop. Press. Reducing Valve 4-97  PRDM Direct Operated Press. Reducing Valve 7-19			
EVSA Direct Operated Press. Relief Valve 4-19 EX-M03 Test Unit 11-41 EX-N08 Power Supply 11-39 F, 9F Throttle Check Valve 10-41 F5C Denison Prop. Throttle Valve 9-49 FM Throttle Check Valve 5-7 GFG2 2 Way Flow Control Valve 5-11 H06 Sandwich Plate 12-25 LCM Press. Compensator 7-43 MSP Multi-Station Manifold 12-13 MV, 9MV Needle Valve 10-37 MVI Cartridge-Type Needle Valve 5-3 N, 9N Needle Valve 10-39 NS Needle Valve 5-5 PADA Adaptor Plate 12-23 PC*MS Flow Control Valve 5-9 PCD00A-400 E-Module for Prop. Press./Flow Control Valve PCM, 9PCM Flow Control Valve 10-43 PE*W Pilot Operated Prop. Press. 4-109 Reducing Valve PID00A-40* E-Module for Closed Loop Control 11-19 PR Pilot Operated Press. Reducing Valve 4-97 PRDM Direct Operated Press. Reducing Valve 7-19		-	
EX-M03         Test Unit         11-41           EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PR         Pilot Operated Press. Reducing Valve         7-19           PRDM         Direct Operated Press. Reducing Valve			
EX-N08         Power Supply         11-39           F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-3           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PRDM         Direct Operated Press. Reducing Valve         7-19			
F, 9F         Throttle Check Valve         10-41           F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-3           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCMA         Flow Control Valve         5-9           PCMA, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PR         Pilot Operated Press. Reducing Valve         7-19           PR         Direct Operated Press. Reducing Valve         7-19	EX-N08		
F5C         Denison Prop. Throttle Valve         9-49           FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-3           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PRDM         Direct Operated Press. Reducing Valve         7-19	F. 9F		
FM         Throttle Check Valve         7-49           FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         7-19			
FS         Throttle Check Valve         5-7           GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PRDM         Pilot Operated Press. Reducing Valve         4-97           PRDM         Direct Operated Press. Reducing Valve         7-19			
GFG2         2 Way Flow Control Valve         5-11           H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         7-19           PRDM         Direct Operated Press. Reducing Valve         7-19			
H06         Sandwich Plate         12-25           LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-5           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         7-19           PRDM         Direct Operated Press. Reducing Valve         7-19			
LCM         Press. Compensator         7-43           MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         5-5           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         7-19           PRDM         Direct Operated Press. Reducing Valve         7-19		· · · · · · · · · · · · · · · · · · ·	
MSP         Multi-Station Manifold         12-13           MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         7-19           PRDM         Direct Operated Press. Reducing Valve         7-19		Press Compensator	
MV, 9MV         Needle Valve         10-37           MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         4-97           PRDM         Direct Operated Press. Reducing Valve         7-19			
MVI         Cartridge-Type Needle Valve         5-3           N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         4-97           PRDM         Direct Operated Press. Reducing Valve         7-19			
N, 9N         Needle Valve         10-39           NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         4-97           PRDM         Direct Operated Press. Reducing Valve         7-19			
NS         Needle Valve         5-5           PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         4-97           PRDM         Direct Operated Press. Reducing Valve         7-19			
PADA         Adaptor Plate         12-23           PC*MS         Flow Control Valve         5-9           PCD00A-400         E-Module for Prop. Press./Flow Control Valve         11-11           PCM, 9PCM         Flow Control Valve         10-43           PE*W         Pilot Operated Prop. Press. Reducing Valve         4-109           PID00A-40*         E-Module for Closed Loop Control         11-19           PR         Pilot Operated Press. Reducing Valve         4-97           PRDM         Direct Operated Press. Reducing Valve         7-19	· '		
PC*MSFlow Control Valve5-9PCD00A-400E-Module for Prop. Press./Flow Control Valve11-11PCM, 9PCMFlow Control Valve10-43PE*WPilot Operated Prop. Press. Reducing Valve4-109PID00A-40*E-Module for Closed Loop Control11-19PRPilot Operated Press. Reducing Valve4-97PRDMDirect Operated Press. Reducing Valve7-19			
PCD00A-400E-Module for Prop. Press./Flow Control Valve11-11PCM, 9PCMFlow Control Valve10-43PE*WPilot Operated Prop. Press. Reducing Valve4-109PID00A-40*E-Module for Closed Loop Control11-19PRPilot Operated Press. Reducing Valve4-97PRDMDirect Operated Press. Reducing Valve7-19			
PCM, 9PCM     Flow Control Valve     10-43       PE*W     Pilot Operated Prop. Press. Reducing Valve     4-109       PID00A-40*     E-Module for Closed Loop Control     11-19       PR     Pilot Operated Press. Reducing Valve     4-97       PRDM     Direct Operated Press. Reducing Valve     7-19		E-Module for Prop. Press./Flow	
PE*W Pilot Operated Prop. Press. A-109 Reducing Valve  PID00A-40* E-Module for Closed Loop Control 11-19 PR Pilot Operated Press. Reducing Valve 4-97  PRDM Direct Operated Press. Reducing Valve 7-19	PCM. 9PCM		10-43
PID00A-40* E-Module for Closed Loop Control 11-19 PR Pilot Operated Press. Reducing Valve 4-97 PRDM Direct Operated Press. Reducing Valve 7-19	·	Pilot Operated Prop. Press.	
PR Pilot Operated Press. Reducing Valve 4-97 PRDM Direct Operated Press. Reducing Valve 7-19	PID00A-40*		11-19
PRDM Direct Operated Press. Reducing Valve 7-19		-	
		·	
	PRM	Pilot Operated Press. Reducing Valve	7-25

chapter1.INDD



## **Alpha-Numerical Product Index**

Product Series	Description	Page
PRPM	Pilot Operated Prop. Press. Reducing Valve	7-39
PSB	Press. Switch	12-39
PWD00A-400	E-Module for Prop. Valve	11-3
PWDXXA-40*	E-Module for Prop. Valve	11-7
PZD00A-40*	E-Module for Command Signal Processing	11-15
R,RS	Pilot Operated Press. Relief Valve, Subplate Mount.	4-27
R,RS*E	Pilot Operated Press. Relief Valve, Slip-In Cartridge	8-27
R1E02	Denison Direct Operated Press. Relief Valve	4-23
R4R	Denison Pilot Operated Press. Reducing Valve - Subplate Mount Pipe Mount.	4-97 10-9
R4R*P*	Denison Pilot Operated Prop. Press. Relief Valve - Subplate Mount. - Pipe Mount.	4-109 10-21
R4S	Denison Pilot Operated Sequence Valve	4-87
R4U	Denison Unloading Valve	4-77
R4V	Denison Pilot Operated Press. Relief Valve - Subplate Mount. - Pipe Mount.	4-27 10-3
R4V	Denison Prop. Press. Relief Valve, OBE, Subplate Mount.	4-61
R4V*P*	Denison Pilot Operated Prop. Press. Relief Valve - Subplate Mount Pipe Mount.	4-53 10-15
R5A	Denison 2-Port Press. Compensator	9-53
R5P	Denison 3-Port Compensator	9-57
R5R	Denison Pilot Operated Press.	
	Reducing Valve	9-19
R5R*P*	Denison Pilot Operated Prop. Press. Reducing Valve	9-31
R5S	Denison Pilot Operated Sequence Valve	9-15
R5U	Denison Pilot Operated Press. Unloading Valve	9-9
R5V	Denison Pilot Operated Press. Relief Valve	9-3
R5V*P*	Denison Pilot Operated Prop. Press. Relief Valve	9-25
R6V	Denison Pilot Operated Press. Relief Valve, Subplate Mount.	4-27
R6V	Denison Pilot Operated Press. Relief Valve, OBE, Subplate Mount.	4-61
R6V*P*	Denison Pilot Operated Prop. Press. Relief Valve, Subplate Mount.	4-53
RDM	Direct Operated Press. Relief Valve	7-3
RE*E*T	Prop. Press. Relief Valve, OBE, Slip-In Cartridge	8-37

Product Series	Description	Page
RE*E*W	Prop. Press. Relief Valve, Slip-In Cartridge	8-33
RE*T	Prop. Press. Relief Valve, OBE, Subplate Mount.	4-61
RE*W	Pilot Operated Prop. Press. Relief Valve, Subplate Mount.	4-53
RE06M*T	Direct Operated Prop. Press. Valve, Subplate Mount.	4-47
RE06M*W	Direct Operated Prop. Relief Valve, Subplate Mount.	4-43
RH	Hydr. Pilot Operated Check Valve	10-49
RK,RB	Threaded Check Valve	6-5
RM	Pilot Operated Press. Relief Valve	7-7
S	Pilot Operated Sequence Valve	4-87
SCPSD	Electronic Press. Switch	12-45
SD500	Press. Intensifier	12-51
SPC	Denison Press. Compensator	7-45
SPD	Subplate	12-3
SPP	Subplate	12-9
SPR	Check Valve	6-15
SPV, SPZ	Check Valve	6-13
SPZBE	Check Valve	6-11
SSR	Shuttle Valve	6-3
SVLA	Check Valve, Hydr. Pilot Operated	8-20
SVLB	Hydr. Pilot Operated Check Valve, Slip-In Cartridge	8-85
SVLE	Hydr. Pilot Operated Check Valve, Subplate Mount.	6-31
TDA	Prop. Throttle Valve	8-69
TDL	Prop. Throttle Valve	8-77
TEA	Prop. Throttle Valve w. Shut-Off Valve	8-73
TEH	Throttle Valve w. Shut-Off Valve	8-65
UR, US	Unloading Valve, Subplate Mount.	4-77
UR*E, US*E	Unloading Valve, Slip-In Cartridge	8-41
VB	Direct Operated Press. Relief Valve	4-7
VBY	Pilot Operated Press. Relief Valve	4-13
VBY*K	Prop. Press. Relief Valve	4-71
V-DAFA	Unloading Valve	8-18/19
V-DNLA	Press. Sequence Valve	8-19
V-DSBA	Preload Valve	8-17/18
V-DSDA	Press. Relief Valve	8-16
V-ZUDB	Press. Relief Valve	8-16/17
VM	Direct Operated Press. Reducing Valv	
VMY	Pilot Operated Prop. Reducing Valve	4-101
VS	Direct Operated Press. Relief Valve	4-3
WM	Press. Gauge Selector Valve	12-37
ZDR	Denison Press. Reducing Valve	7-33
ZDV	Denison Press. Relief Valve	7-13
ZRD	Denison Throttle Valve w. Check	7-13
ZRE	Denison Pilot Operated Check Valve	7-37
ZRV	Denison Direct Operated Check Valve	
	•	
ZSRA / ZSRB	Shuttle Valve	8-20

chapter1.INDD



**Parker** develops superior products. Over the years we have added many market leading lines in order to provide you with the best offering in the world:

**Towler** was founded in 1866 as a pioneer in press hydraulics at very high pressures. The design of a range of slip-in cartridges for manifolds brought unlimited flexibility into hydraulic circuits and enhanced hydraulics in many applications. A wide range of proportional valves was developed from pressure controls over directional controls to fast acting cartridge valves.

**Parker** was founded in 1918 and started with hydraulics for aircrafts. The Colorflow flow and pressure valves, manually adjustable with visual setting control, were a revolutionary offering for the industrial market, followed by various lines of solenoid operated directional control valves. New on the market: wet solenoids for leak-free hydraulics.

**Denison** was founded in 1931 and another pioneer in press hydraulics. They were the first to introduce a seat-type pilot operated cartridge relief valve to the market and set the trend for all manufacturers. The valve is still unbeaten in its ease of use and performance in all applications. Various housing options are successfully used in all market segments.

**Hydraulik Ring** was formed in 1967 as a dedicated manufacturer of high precision hydraulics for an association of German machine tool makers. Their product strength was precise flow control in open or closed loop applications, high performance pressure control and pressure intensification for clamping.

This catalogue contains the best industrial valves of these brands. It is an outperforming and full range of industrial valves for any kind of application. In order to allow our new customers from the latest line addition to carry on with model codes in existing parts lists we show some of the valves under the Denison brand and model code in parallel to the Parker brand and model code.

Dr. Gerd Scheffel General Manager



## **Systems Solutions**

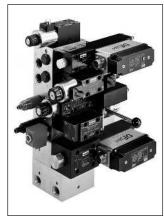
Parker is more than a supplier of excellent components. Together with our customers, we develop innovative systems solutions. In this industrial valves catalogue, we would like to point out to you our special competence in industrial control units. Our experienced, highly motivated team answers technical needs with complete, sound solutions.

Our performance spectrum comprises a complex understanding of the job, project management, design, and production, including final tests of control units on our modern, automated test beds. In addition we offer compact hydraulic axis controls.

When you entrust us with your system requirements, you can rely on getting an optimal solution from the Parker valves program with all components used in accordance with their characteristics. Furthermore you can rely on us taking full responsibility for all our valves, electronics and combined functions within the system.

Parker is strong in customized solutions but we also supply standardized press controls (e.g. certified versions in



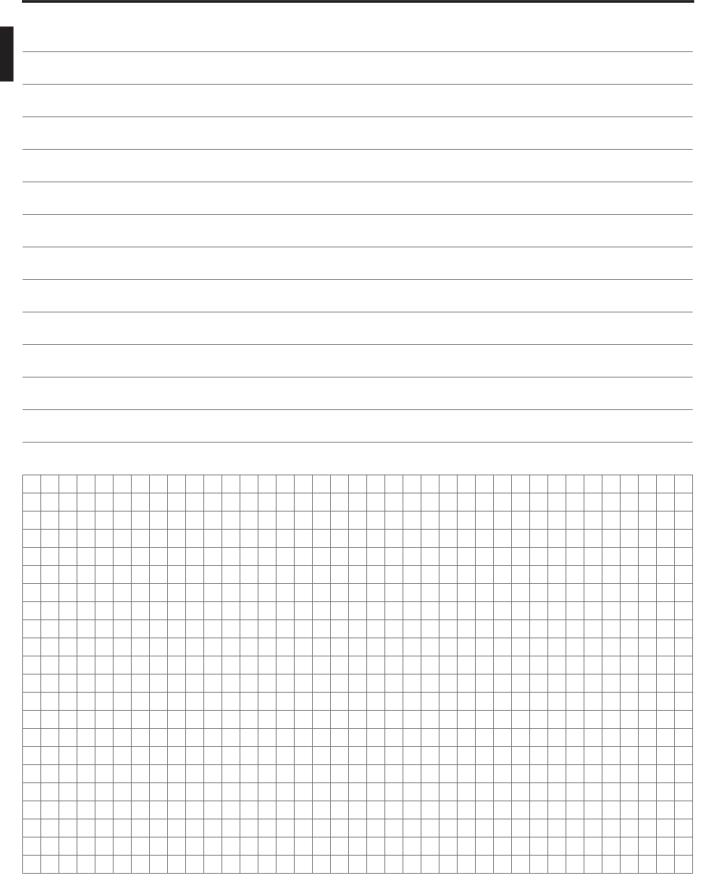


nominal sizes NG 06 through NG50) as fully shown in our brochure HY11-3235/UK on Hydraulics for Press Controls.

Contact your Parker representation for information and offerings concerning your hydraulics.







chapter1.INDD RH\_17.01.08

