



This publication is intended as a reference guide to assist customers in configuring and ordering some common Danfoss valves for their applications. The availability of components listed here will vary depending on the valve type and size. Always confirm your valve configuration with the assistance of a Phillips representative.

Valves listed in this bulletin include:

PRESSURE REGULATORS

MOTORIZED VALVES

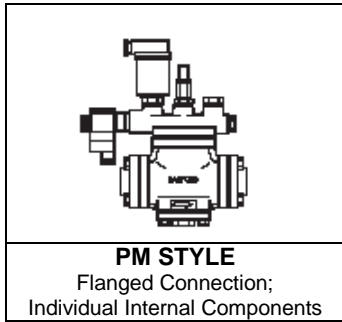
GAS POWERED STOP VALVES

SOLENOID VALVES (Pilot, Direct, Assisted Lift, 2-Step)

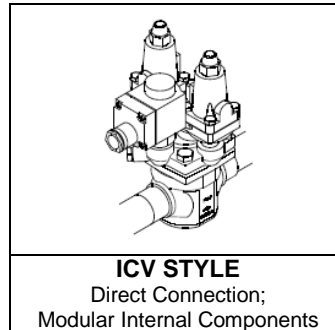
ELECTRONIC EXPANSION VALVES

VALVE STATIONS

MULTI-FUNCTION PRESSURE REGULATORS

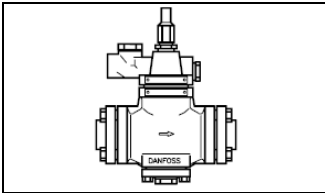


PMR	20	JS-	E	Q	B	A	K
Base Valve Model							
VALVE SIZE							
5 = 3/16"	40 = 1-1/2"						
10 = 3/8"	50 = 2"						
15 = 5/8"	65 = 3"						
20 = 3/4"	80 = 4"						
25 = 1"	100 = 5"						
32 = 1-1/4"	125 = 6"						
FUNCTION See Table 4							
B	DJ	PD					
BB	DL	PO					
BK	DP	S					
BL	JD	SD					
BO	JS	SJ					
BS	OBS	SK					
D	OS	Z					
DE	PB						
1st PILOT OPTION See Table 1							
2nd PILOT OPTION See Table 1							
3rd PILOT OPTION See Table 1							
COIL See Table 2 Use 12W coil or larger with EVM (NO)							
FLANGES See Table 3							



ICR	25	D-	E	P	P	A	J
Base Valve Model							
VALVE SIZE							
5 = 3/16"	50 = 2"						
10 = 3/8"	65 = 2-1/2"						
15 = 5/8"	80 = 3"						
20 = 3/4"	100 = 4"						
25 = 1"	125 = 5"						
32 = 1-1/4"	150 = 6"						
40 = 1-1/2"							
FUNCTION See Table 4							
B	DJ	PD					
BB	DL	PO					
BK	DP	S					
BL	JD	SD					
BO	JS	SJ					
BS	OBS	SK					
D	OS	Z					
DE	PB						
1st PILOT OPTION See Table 1							
2nd PILOT OPTION See Table 1							
3rd PILOT OPTION See Table 1							
COIL See Table 2 Use 12W coil or larger with EVM (NO)							
CONNECTIONS See Table 3 and note at Table 3							

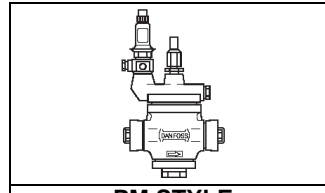
SINGLE-FUNCTION PRESSURE REGULATORS



PMFL/PMFH STYLE

Flanged Connection;
Individual Internal Components

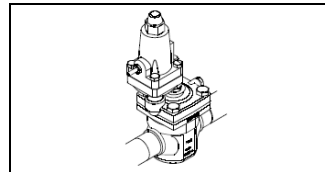
PMFL	80-1-	H	A	H	A
Base Valve Model					
VALVE SIZE					
80-1	80-7				
80-2	125				
80-3	200				
80-4	300				
80-5	500				
80-6					
PILOT OPTION See Table 1					
COIL See Table 2					
FLANGES See Table 3					
SV PILOT VALVE OPTION					
A = SV1					
B = SV2					
C = SV3					
D = SV4 with housing					
E = SV4 without housing					
F = SV5 with housing					
G = SV5 without housing					
H = SV6 with housing					
I = SV6 without housing					
Z = No SV valve					



PM STYLE

Flanged Connection;
Individual Internal Components

PMR	20	O-	C	D	(-)
Base Valve Model					
VALVE SIZE					
5 = 3/16"	40 = 1-1/2"				
10 = 3/8"	50 = 2"				
15 = 5/8"	65 = 3"				
20 = 3/4"	80 = 4"				
25 = 1"	100 = 5"				
32 = 1-1/4"	125 = 6"				
FUNCTION					
(Blank) = Basic Regulator					
J = Electronic Control					
K = Reseating Relief					
L = Differential Pressure					
O = Outlet Pressure					
PILOT OPTION See Table 1					
FLANGES See Table 3					
PRESSURE SETTING (Used on "K" function only) Example: PMR25K-PE-75					

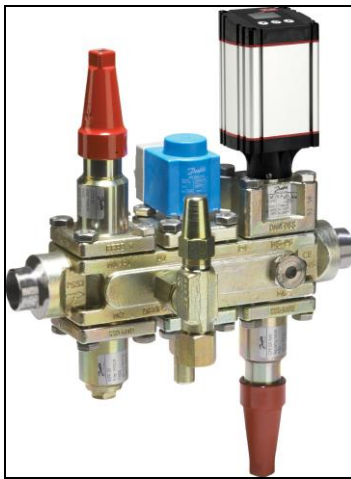
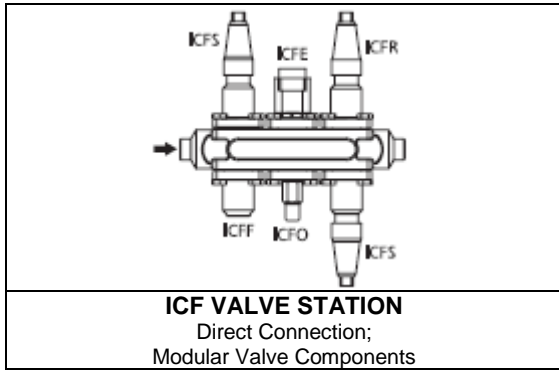


ICV STYLE

Direct Connection;
Modular Internal Components

ICR	25	L-	K	D	(-)
Base Valve Model					
VALVE SIZE					
5 = 3/16"	50 = 2"				
10 = 3/8"	65 = 2-1/2"				
15 = 5/8"	80 = 3"				
20 = 3/4"	100 = 4"				
25 = 1"	125 = 5"				
32 = 1-1/4"	150 = 6"				
40 = 1-1/2"					
FUNCTION					
(Blank) = Basic Regulator					
J = Electronic Control					
K = Reseating Relief					
L = Differential Pressure					
O = Outlet Pressure					
PILOT OPTION See Table 1					
CONNECTIONS See Table 3 and note at Table 3					
PRESSURE SETTING (Used on "K" function only) Example: ICR25K-PE-75					

VALVE STATIONS



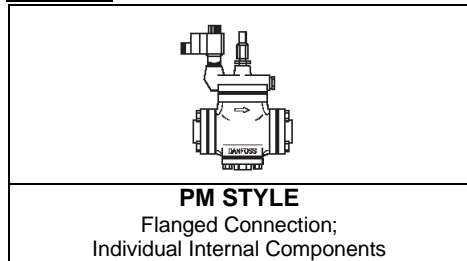
ICF		20-6-1-		A	D
Base Valve Model					
VALVE STATION CONFIGURATIONS					
20-6-1	20-6-20	20-4-8	25-4-14A		
20-6-1H	20-6-21	20-4-9	25-4-18		
20-6-2	25-6-1A	20-4-9H	25-4-26H		
20-6-2H	32-6-2A	20-4-10	32-4-8		
20-6-3	32-6-3A	20-4-10H	32-4-9		
20-6-3H	32-6-3B	20-4-11	32-4-10A		
20-6-4	32-6-5A	20-4-11H	32-4-10B		
20-6-5A	32-6-5B	20-4-12	32-4-11		
20-6-5A33	32-6-15B	20-4-13	32-4-14A		
20-6-5AH	32-6-20	20-4-14A	32-4-14B		
20-6-5B66	25-6-3A	20-4-14B66	32-4-18		
20-6-5B	25-6-5A	20-4-14C	40-4-8		
20-6-5BH	25-6-21	20-4-14C	40-4-9		
20-6-5C	32-6-1A	20-4-17	40-4-10B		
20-6-5CH	32-6-1B	20-4-18H	40-4-11		
20-6-6	40-6-1B	20-4-24	40-4-14A		
20-6-7	40-6-3B	20-4-25	40-4-14B		
20-6-15	40-6-5A	20-4-26H	40-4-18		
20-6-16	40-6-5B	25-4-9	Z=Special		
20-6-19	40-6-15B	25-4-10A			

COIL
See Table 2

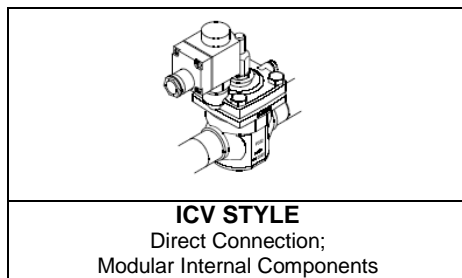
CONNECTIONS

- D = 3/4" SW
- F = 1" SW
- J = 1-1/4" SW
- K = 1-1/4" WN
- M = 1-1/2" SW
- N = 1-1/2" WN
- A9 = 3/4" WN

PILOT OPERATED SOLENOID VALVES



PMS	20-	E	A	Z
Base Valve Model				
VALVE SIZE				
20 = 3/4"	65 = 3"			
25 = 1"	80 = 4"			
32 = 1-1/4"	100 = 5"			
40 = 1-1/2"	125 = 6"			
50 = 2"				
PILOT OPERATOR				
E = Normally Closed				
F = Normally Open				
COIL See Table 2				
Use 12W coil or larger with EVM (NO)				
FLANGES				
See Table 3				



ICS	5-	E	A	D
Base Valve Model				
VALVE SIZE				
5 = 3/16"	50 = 2"			
10 = 3/8"	65 = 2-1/2"			
15 = 5/8"	80 = 3"			
20 = 3/4"	100 = 4"			
25 = 1"	125 = 5"			
32 = 1-1/4"	150 = 6"			
40 = 1-1/2"				
PILOT OPERATOR				
E = Normally Closed				
F = Normally Open				
COIL See Table 2				
Use 12W coil or larger with EVM (NO)				
CONNECTIONS				
See Table 3 and note at Table 3				

DIRECT / PILOT OPERATED & ASSISTED LIFT SOLENOID VALVES



EVRAT	20-	A	D	A
Base Valve Model				
EVRAT = Direct or Pilot				
EVRAT = Assisted Lift				
VALVE SIZE				
3 = 3/16"	25 = 1"			
10 = 3/8"	32 = 1-1/4"			
15 = 5/8"	40 = 1-1/2"			
20 = 3/4"				
COIL				
See Table 2				
EVRAT - Use 12W coil or larger				
FLANGES				
See Table 3				
STRAINER				
A = With Close-Coupled Strainer				
FA15 (EVRAT/ 3 thru 15)				
FA20 (EVRAT/ 20)				
Z = No Strainer				

MOTORIZED VALVES



ICV STYLE

Direct Connection;
Modular Internal Components

ICM	32A-	J	C	B	-10
Base Valve Model					
VALVE SIZE					
20A33 = Cv 0.23	40A = Cv 17				
20A = Cv 0.7	40B = Cv 30				
20B66 = Cv 1.9	50A = Cv 27				
20B = Cv 2.8	50B = Cv 46				
20C = Cv 5.3	65A = Cv 41				
25A = Cv 7.0	65B = Cv 81				
25B = Cv 13.9	100B = Cv 167				
32A = Cv 10.4	125B = Cv 260				
32B = Cv 20	150B = Cv 430				
CONNECTIONS					
See Table 3 and note at Table 3					
STRAINER (Globe Style Body)					
A = BW	C = SW				
B = FPT	Z = No Strainer				
STRAINER ELEMENT					
A = 100 mesh (150m)	D = 150 mesh (100m)				
B = 72 mesh (250m)	Z = No Element				
C = 38 mesh (500m)					
ICAD CABLE LENGTH					
-1.5 = Std 1.5 meters					
(BLANK) = 3 meters (Standard)					-10 = 10 meters

GAS POWERED STOP VALVES



PML	125-	1	A	E	A3
Base Valve Model					
VALVE SIZE					
32 = 1-1/4"	80 = 4"				
40 = 1-1/2"	100 = 5"				
50 = 2"	125 = 6"				
65 = 3"					
PILOT COMBINATIONS					
1 = Standard: NC (SII), NO (P)					
2 = NC (SII), NC (P)					
"SII" COIL					
See Table 2					
"P" COIL					
See Table 2					
Use 12W coil or larger with EVM (NO)					
FLANGES					
See Table 3					

TWO-STEP OPENING SOLENOID VALVES








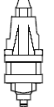
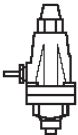
PMLX	100-	A	X	A	A2	-PL
Base Valve Model						
VALVE SIZE						
32 = 1-1/4"	80 = 4"					
40 = 1-1/2"	100 = 5"					
50 = 2"	125 = 6"					
65 = 3"						
PILOT COMBINATIONS						
A = Standard: NC (SII), NO (P)						
B = NO (SII), NC (P)						
C = NC (SII), NC (P)						
PILOT CONNECTION						
X = 3/8" WN, Y = 1/4" FPT						
COIL VOLTAGE						
A = 110V/60HZ			D = 115V/60HZ			
B = 220V/60HZ			Z = Special, or no coils			
C = 24VDC						
FLANGES						
See Table 3						
OPTIONAL COIL PILOT LIGHT See Table 2						
-PL						

ELECTRONIC EXPANSION VALVES



AKVA	15-3-	L	E	A
Base Valve Model				
VALVE SIZE				
10-1	15-1	20-1		
10-2	15-2	20-2		
10-3	15-3	20-3		
10-4	15-4	20-4		
10-5		20-5		
10-6				
10-7				
10-8				
COIL				
L = 24VAC/60HZ (Standard)				
See Table 2 for other options				
CONNECTION SIZES				
Z = 3/8" x 1/2" weld (AKVA10-1 thru AKVA10-6)				
= 1/2" x 3/4" weld (AKVA10-7, AKVA10-8)				
= 1-1/4" x 1-1/4" weld (AKVA20-1 thru AKVA20-3)				
= 1-1/2" x 1-1/2" weld (AKVA20-4)				
= 2" x 2" weld (AKVA20-5)				
AKVA15: See Table 3 for flange options				
STRAINER				
A = With Strainer				
FIA15, Globe Style, SW, 100m (AKVA10)				
FIA20, Globe Style, SW, 100m (3/4" AKVA15)				
FIA25, Globe Style, SW, 100m (1" AKVA15)				
FIA32, Globe Style, SW, 100m (AKVA20-1 thru -3)				
FIA40, Globe Style, SW, 100m (AKVA20-4)				
FIA50, Globe Style, SW, 100m (AKVA20-5)				
Z = No Strainer				

TABLE 1: PILOT OPTIONS

A	Pressure Gauge Connection (G1/4A Male x 1/4FPT)	027B2062		
B	Pilot Blanking Plug	027F1046		
C	CVC 13.3" Hg – 102 psig (Requires Pressure Gauge Connection, "A")	027B1070		
D	External Pilot Conn. (1/4FPT, for PM80-125)	027B2066		
E	EVM (NC)	027B1120		
F	EVM (NO) (Use 12W coil or larger)	027B1130		
H	CVP (XP) MWP: 754 psig Range: 363-754 psig	027B0080		
I	CVPP (HP) MWP: 580 psig Range: 58 - 319 psig	Requires Pressure Gauge Connection, "A"	 CVPP (HP)	
J	CVPP (HP) MWP: 406 psig Range: 0 - 102 psig			027B1268
K	CVPP (LP) MWP: 247 psig Range: 0 - 102 psig			027B1162
K		027B1102		






L	CVP (HP) MWP: 406 psig Range: 58 - 406 psig	027B1161	
M	CVP (HP) MWP: 406 psig Range: 58 - 319 psig	027B1160	
N	CVP (LP) MWP: 247 psig Range: 20" Hg - 29 psig	027B1101	CVP (LP)
O	CVP (HP) MWP: 406 psig Range: 20" Hg -102 psig	027B1164	
P	CVP (LP) MWP: 247 psig Range: 0 - 102 psig	027B1100	
Q	CVQ Range: 0 - 87 psig	027B1140	
R	CVQ Range: 25 - 116 psig	027B1141	
S	CVQ Range: 30" Hg - 72.5 psig	027B1139	
X	External Pilot Conn. (1/4FPT, for PM5-65)	027B2065	
Y	External Pilot Conn.	IC/PM5-65 IC/PM80-125 027B2065 027B2066	
A5	CVC 58 – 406 psig (Requires Pressure Gauge Connection, "A")	027B0087	

TABLE 2: COIL OPTIONS

	Voltage	Watts	Connect.	UL App	Pilot Light	Part Number
A	115/60	10	IP67 TERM BOX			018F6710
B	220/60	10	IP67 TERM BOX			018F6714
C	24/60	10	IP67 TERM BOX			018F6715
D	24VDC	20	IP67 TERM BOX			018F6857
E	110/60	12	IP67 TERM BOX			018F6813
F	220-230/50	12	IP67 TERM BOX			018F6801
G	220-230/50-60	10	IP67 TERM BOX			018F6732
H	220/60	12	IP67 TERM BOX			018F6814
I	110/50-60	10	IP67 TERM BOX			018F6730
J	24/60	10	IP20 SPADE			Not Available
K	220-230/50-60	10	IP20 SPADE			018F6193
L	24/60	20	IP67 TERM BOX			018F6902
M	115/60	10	IP20 SPADE			018F6185
N	220-230/50	10	IP67 TERM BOX			018F6701
O	24/60	12	IP67 TERM BOX			018F6815
Q	240/60	10	IP67 TERM BOX			018F6713
R	110/50-60	10	IP67 TERM BOX		GREEN	Not Available
S	110/50-60	14	IP00 DIN PLUG	Y		018F7663

	Voltage	Watts	Connect.	UL App	Pilot Light	Part Number
T	208-240/60	14	NEMA 2 TERM BOX	Y		018F4120
U	110/50-60	14	NEMA 2 TERM BOX	Y		018F4110
V	24/50-60	14	NEMA 2 TERM BOX	Y		018F4100
W	208-240/60	14	NEMA 4 1/2"NPT 18" WIRE	Y		018F4122
X	110/50-60	14	NEMA 4 1/2"NPT 18" WIRE	Y		018F4112
Y	24/50-60	14	NEMA 4 1/2"NPT 18" WIRE	Y		018F4102
A1	115/60	10	IP67 TERM BOX		GREEN	Not Available
A4	120/50-60	14	IP00 DIN PLUG	Y	GREEN	Not Available
A7	110-120/60	14	IP00 DIN PLUG	Y		018F7991
B1	220/60	10	IP67 TERM BOX		GREEN	Not Available
C1	240/60	10	IP67 TERM BOX		GREEN	Not Available
D1	24VDC	20	IP67 TERM BOX		GREEN	Not Available
E1	110/60	12	IP67 TERM BOX		GREEN	018F6816
F1	220-230/50	12	IP67 TERM BOX		GREEN	Not Available
G1	220-230/50-60	10	IP67 TERM BOX		GREEN	Not Available

TABLE 3: FLANGE / CONNECTION OPTIONS

(Only connections indicated by asterisk (*) are available for ICV & ICM valves. Contact Phillips for specific flange/connection availability.)

A	1/2" FPT	O*	1-3/8" ODS	A3*	6" WN
B	1/2" SOC	P*	1-5/8" ODS	A5	3/8" FPT
C*	3/4" FPT	Q	2" FPT	A6	3/8" SOC
D*	3/4" SOC	R*	2" SOC	A8	1/2" WN
E*	1" FPT	S*	2" WN	A9	3/4" WN
F*	1" SOC	T*	2-1/8" ODS	B1	7/8" ODS
G*	1" WN	U	3" FPT	B2*	2-1/2" WN
H*	1-1/8" ODS	V	3" SOC	B3*	2-5/8" ODS
I	1-1/4" FPT	W*	3" WN	B4*	2-1/2" SOC
J*	1-1/4" SOC	X	3-1/8" ODS	B5	5/8" ODS
K*	1-1/4" WN	Y	4" SOC	B6	4-1/8" ODS
L	1-1/2" FPT	Z	None	B7	1/2" DIN BW
M*	1-1/2" SOC	A1*	4" WN		
N*	1-1/2" WN	A2*	5" WN		

TABLE 4: VALVE FUNCTIONS

	Description
B	Electric Wide Open
BB	Dual Electric Wide Open
BK	Electric Wide Open with Preset Pressure
BL	Electric Wide Open with Differential Pressure Control
BO	Outlet Pressure Regulation with Electric Wide Open
BS	Electric Wide Open with Electric Closing
D	Dual Pressure Control
DE	Dual Pressure Control From Internal and External Settings
DJ	Electronic Control with Pressure Control and Low Pressure Protection
DL	Inlet and Differential Pressure Control
DP	Differential Pressure Control
J	Electronic Control
JD	Electronic Control with Dual Pressure Control
JS	Electronic Control with Electric Closing
K	Reseating Relief
L	Differential Pressure Control
O	Outlet Pressure Regulator
OBS	Outlet Pressure Regulation with Electric Wide Open and Electric Closing
OS	Outlet Pressure Regulator with Electric Closing
PB	Electronic Control with Electric Wide Open and Low Pressure Protection
PD	Differential Control with Dual Pressure
PO	Outlet Pressure Regulation with Low Pressure Protection
S	Electric Closing
SD	Electric Wide Open with Electric Closing and Differential Pressure Control
SJ	Electronic Control with Electric Wide Open and Electric Closing
SK	Electric Closing with Preset Pressure
Z	Special

Table 5: Options

Code	Function/Description	Where Used
-##	Preset Pressure setting in PSIG	All valves with a CVP pilot.
-EXT1, -EXT2, -EXTP	Adding an external pilot connection to SI, SII or P	The external pilot connection would be installed in the port (SI, SII, or P). Then the pilot valve for that port would be mounted in a CVH valve body and connected to the external pilot connection.

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