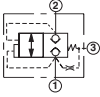
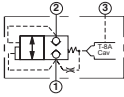
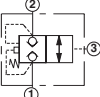


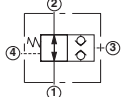
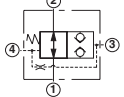
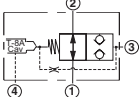
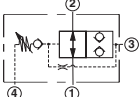
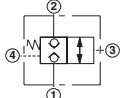
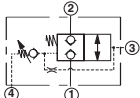
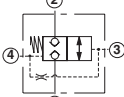
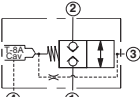
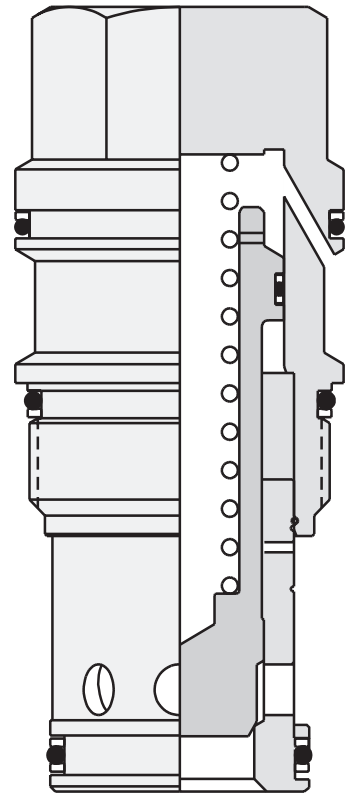
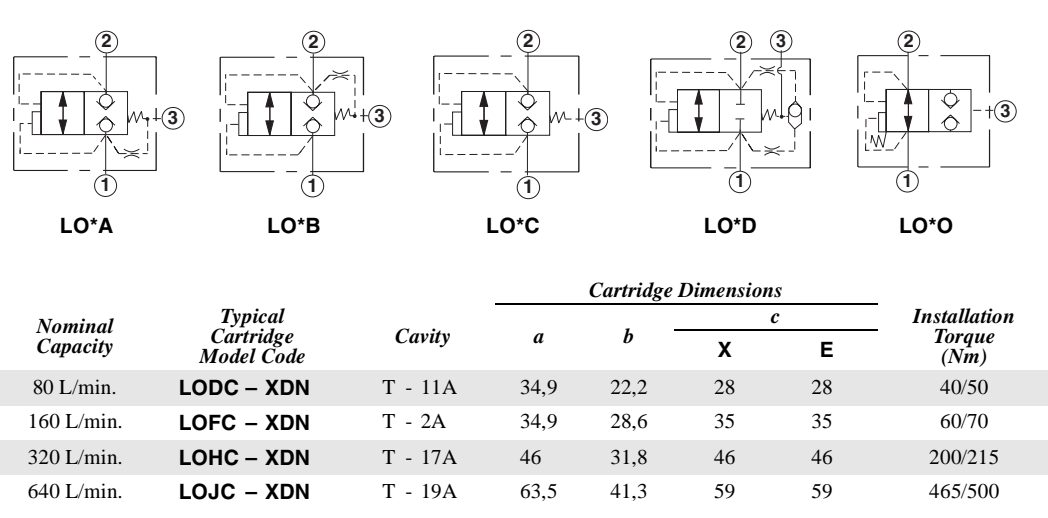
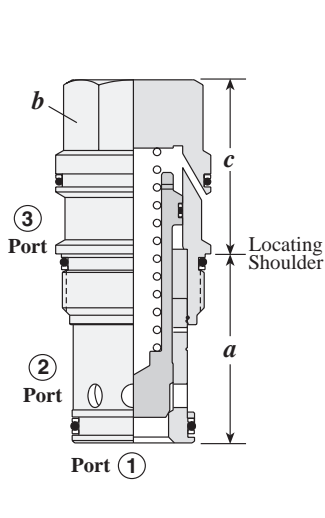


Logic Elements

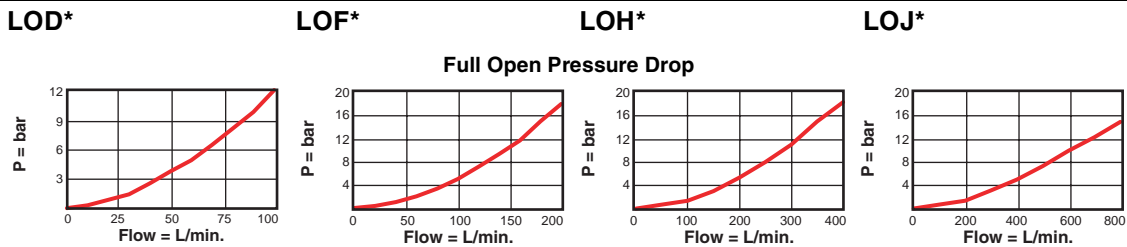
<i>Cartridge Type</i>	<i>Page</i>
	Unbalanced Poppet, Pilot-to-Close Switching Element 88
	Unbalanced Poppet, Pilot-to-Close Switching Element with Integral Pilot Control Cavity 89
	Unbalanced Poppet, Pilot-to-Open Switching Element 90
	Normally Open Modulating Element 91
	Normally Closed Modulating Element 92
	Normally Open, Direct Operated 93
	Normally Open, Vent-to-Operate 94
	Normally Open, Vent-to-Operate with Integral Pilot Control Cavity 95
	Normally Open, Pressure Adjustable 96
	Normally Closed, Direct Operated 97
	Normally Closed, Pressure Adjustable 98
	Normally Closed, Vent-to-Operate 99
	Normally Closed, Vent-to-Operate with Integral Pilot Control Cavity 100



UNBALANCED POPPET, PILOT-TO-CLOSE SWITCHING ELEMENT



Performance Curves



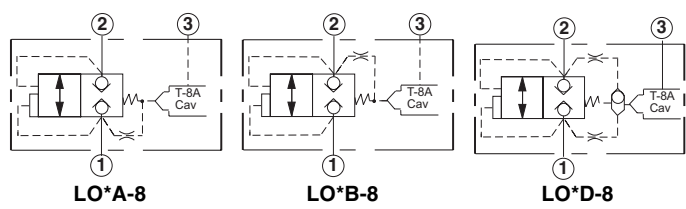
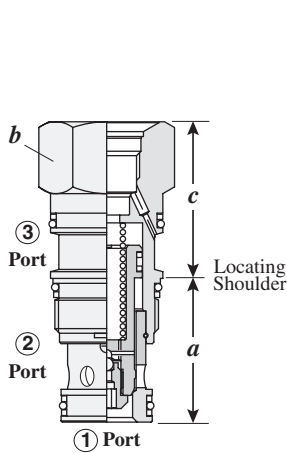
- Maximum operating pressure = 350 bar
- Area ratio: A3 to A1 = 1.8:1
- Area ratio: A3 to A2 = 2.25:1
- Control orifice diameter = LODA, LODB, LODD, LOFA, LOFB, LOFD: 0,53 mm, LOHA, LOHB, LOHD: 0,8 mm, LOJA, LOJB, LOJD: 0,9 mm.
- Pilot volume for complete shift = LOD*: 0,6 c.c., LOF*: 1,1 c.c., LOH*: 4,1 c.c., LOJ*: 6,9 c.c.
- These valves are pressure responsive at all three ports, therefore it is essential to consider all aspects of system operation through a complete cycle. Pressure changes at any one port may cause a valve to switch from a closed to an open position, or vice versa. All possible pressure changes in the complete circuit must be considered to assure a safe, functional system design.

Nominal Capacity	Version	Control**	Cracking Pressure A, B, C, D Versions	Seal
D 80 L/min.	A Spring biased closed Port 1 pilot source	X Non-adjustable	D 3,5 bar at Port 1 (2 bar to close at Port 3 for O Version)	N Buna-N
F 160 L/min.	B Spring biased closed Port 2 pilot source	<i>Available in B and C Versions Only</i>		V Viton
H 320 L/min.	C Spring biased closed Port 3 pilot source	E SAE-4 Port in Hex Body, Port 3 blocked		
J 640 L/min.	D Spring biased closed higher of Ports 1 or 2 pilot source	<i>Available in D and F Capacities Only</i>		
	O Spring biased open Port 3 pilot source	L Stroke Adjustment		

** See page 162 for information on Control Options

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

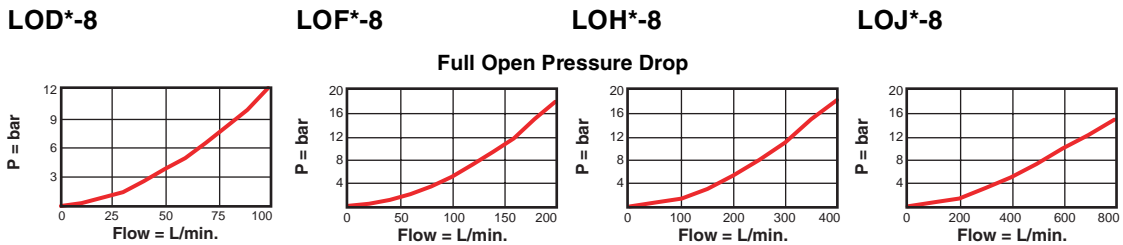
UNBALANCED POPPET, PILOT-TO-CLOSE SWITCHING ELEMENT WITH INTEGRAL PILOT CONTROL CAVITY



The -8 control option allows a pilot control valve to be incorporated directly into the end of the cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include solenoid and air pilot operation. See Pilot Control Cartridges on page 121.

Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
80 L/min.	LODA – 8DN	T - 11A	34,9	22,2	28	40/50
160 L/min.	LOFA – 8DN	T - 2A	34,9	28,6	35	60/70
320 L/min.	LOHA – 8DN	T - 17A	46	31,8	46	200/215
640 L/min.	LOJA – 8DN	T - 19A	63,5	41,3	59	465/500

Performance Curves



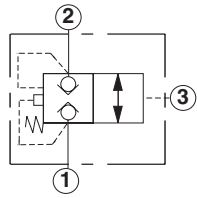
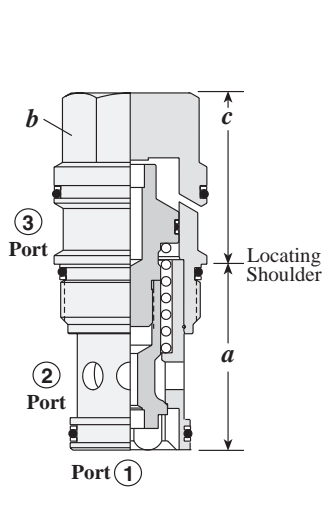
- Maximum operating pressure = 350 bar
- Area ratio: A3 to A1 = 1.8:1
- Area ratio: A3 to A2 = 2.25:1
- Control orifice diameter = LOD*-8, LOF*-8, LOF*-8: 0,53 mm, LOH*-8, LOH*-8: 0,8 mm, LOJ*-8, LOJ*-8: 0,9 mm.
- These valves are pressure responsive at all three ports, therefore it is essential to consider all aspects of system operation through a complete cycle. Pressure changes at any one port may cause a valve to switch from a closed to an open position, or vice versa. All possible pressure changes in the complete circuit must be considered to assure a safe, functional system design.
- With the -8 control option, the main stage valve should first be installed to the correct torque value. The T-8A pilot control valve should then be installed into the main stage valve to its required torque value.

Nominal Capacity	Version	Control**	Cracking Pressure A, B, D Versions	Seal
D 80 L/min.	A Spring biased closed Port 1 pilot source	8 T-8A Cavity in hex body for pilot operation (Pilot valve to be ordered separately)	D 3,5 bar at Port 1	N Buna-N
F 160 L/min.	B Spring biased closed Port 2 pilot source			V Viton
H 320 L/min.				
J 640 L/min.	D Spring biased closed higher of Ports 1 or 2 pilot source			

** See page 162 for information on Control Options

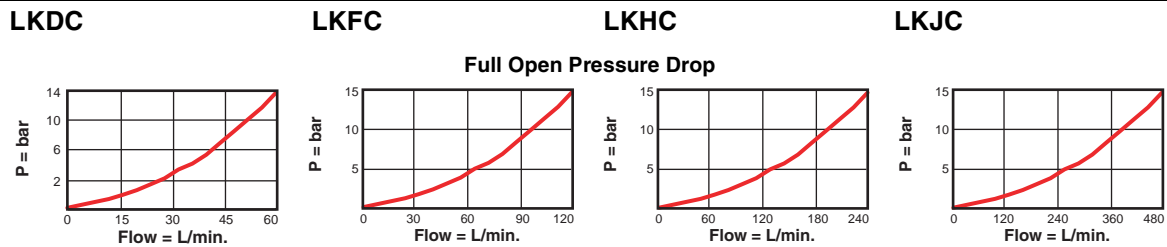
Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

UNBALANCED POPPET, PILOT-TO-OPEN SWITCHING ELEMENT



Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	LKDC – XDN	T - 11A	34,9	22,2	28	40/50
120 L/min.	LKFC – XDN	T - 2A	34,9	28,6	35	60/70
240 L/min.	LKHC – XDN	T - 17A	46	31,8	46	200/215
480 L/min.	LKJC – XDN	T - 19A	63,5	41,3	59	465/500

Performance Curves



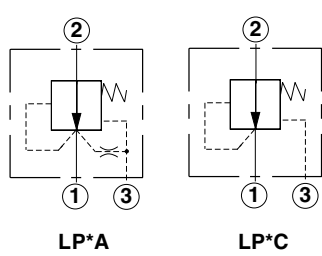
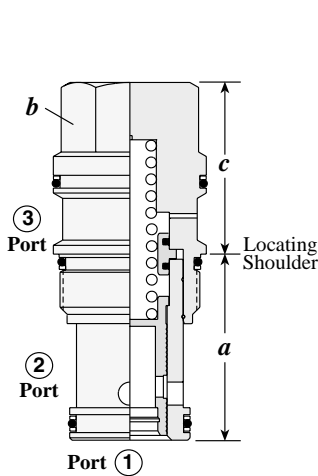
- Maximum operating pressure = 350 bar
- Area ratio: A3 to A1 = 1.8:1
- Area ratio: A3 to A2 = 2.25:1
- Control orifice diameter = LKDC: 0,8 mm, LKFC: 0,9 mm, LKHC: 1,6 mm, LKJC: 2,4 mm
- Pilot volume for complete shift = LKDC: 0,33 c.c., LKFC: 1,0 c.c., LKHC: 2,5 c.c., LKJC: 4,9 c.c.
- These valves are pressure responsive at all three ports, therefore it is essential to consider all aspects of system operation through a complete cycle. Pressure changes at any one port may cause a valve to switch from a closed to an open position, or vice versa. All possible pressure changes in the complete circuit must be considered to assure a safe, functional system design.

	LK ★ ★		-	★ ★ ★		
<i>Nominal Capacity</i>	<i>Version</i>		<i>Control**</i>	<i>Cracking Pressure</i>		<i>Seal</i>
D 60 L/min.	C Port 3 pilot source		X Non-adjustable	D 3,5 bar at Port 3		N Buna-N
F 120 L/min.			<i>Available in D and F Capacities Only</i>			V Viton
H 240 L/min.			L Manual Release			
J 480 L/min.						

** See page 162 for information on Control Options

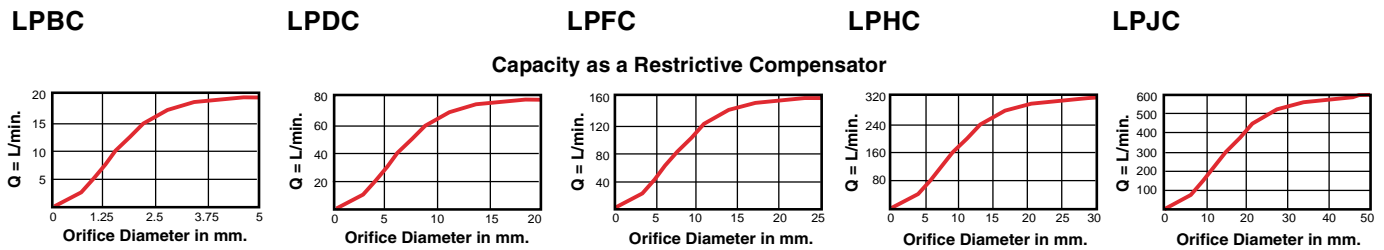
Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

NORMALLY OPEN MODULATING ELEMENT

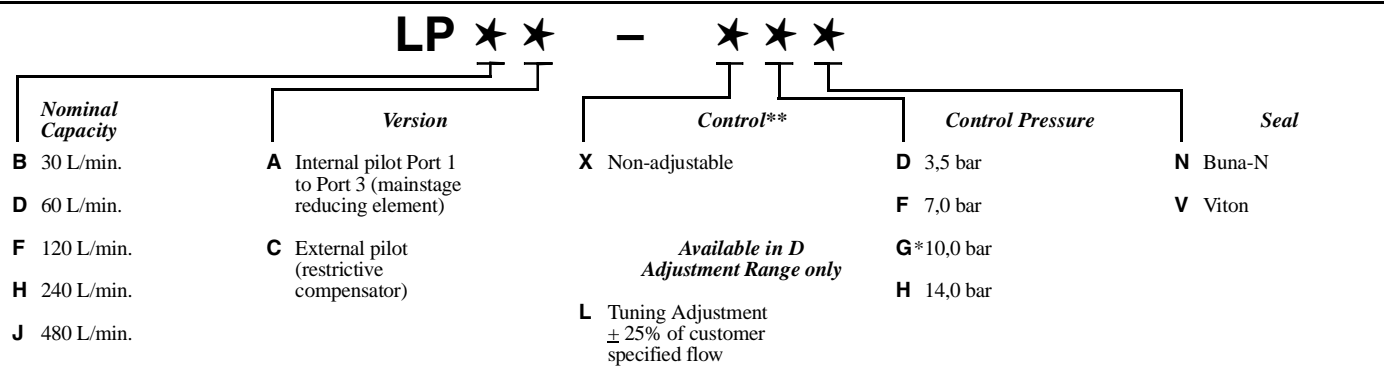


Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions				Installation Torque (Nm)
			a	b	X	L	
30 L/min.	LPBC – XHN	T - 163A	31	19,1	32	65	35/40
60 L/min.	LPDC – XHN	T - 11A	34,9	22,2	31	64	40/50
120 L/min.	LPFC – XHN	T - 2A	34,9	28,6	35	72	60/70
240 L/min.	LPHC – XHN	T - 17A	46	31,8	46	84	200/215
480 L/min.	LPJC – XHN	T - 19A	63,5	41,3	59	100	465/500

Performance Curves



- Maximum operating pressure = 350 bar
- Maximum leakage at 150 SUS, port 3 = 16,4 cc/min.
- Control orifice diameter = LPB*, LPD*, LPF*: 0,4 mm, LPH*, LPJ*: 0,53 mm.

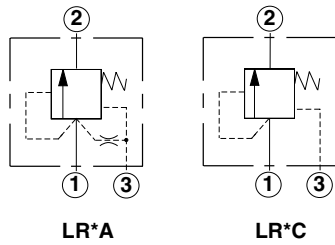
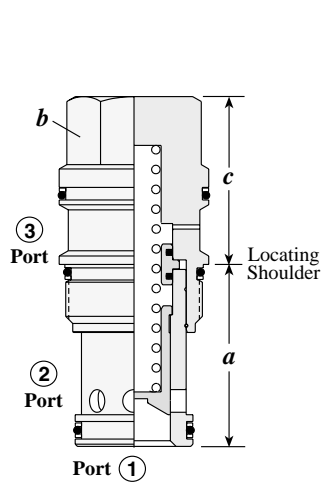


** See page 162 for information on Control Options

* G Adjustment Range not available in LPBA, LPBC.

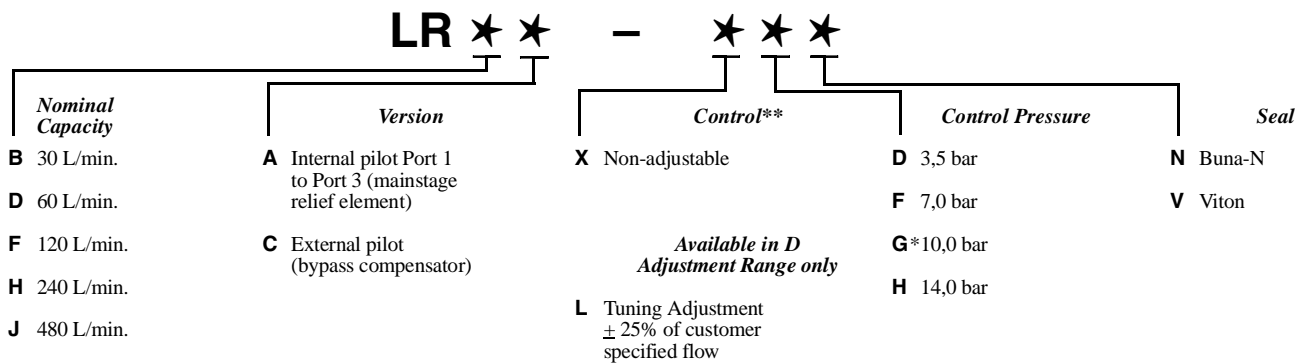
Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

NORMALLY CLOSED MODULATING ELEMENT



Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions				Installation Torque (Nm)
			a	b	c		
					X	L	
30 L/min.	LRBC – XHN	T - 163A	31	19,1	32	65	35/40
60 L/min.	LRDC – XHN	T - 11A	34,9	22,2	31	64	40/50
120 L/min.	LRFC – XHN	T - 2A	34,9	28,6	35	72	60/70
240 L/min.	LRHC – XHN	T - 17A	46	31,8	46	84	200/215
480 L/min.	LRJC – XHN	T - 19A	63,5	41,3	59	100	465/500

- Maximum operating pressure = 350 bar
- Control orifice diameter = LRB*, LRD*, LRF*: 0,4 mm, LRH*, LRJ*: 0,53 mm.

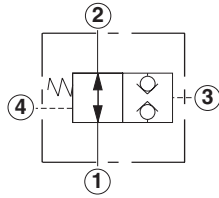
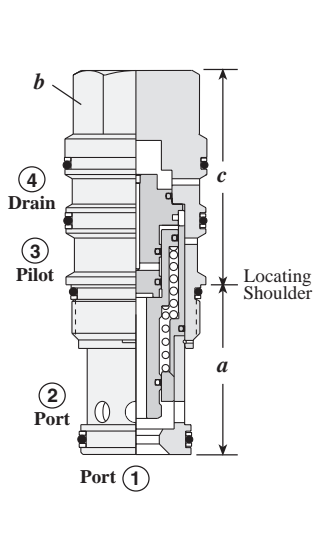


** See page 162 for information on Control Options

* G Adjustment Range not available in LRBA, LRBC.

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

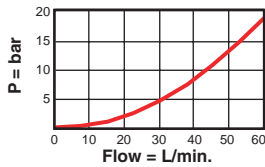
NORMALLY OPEN, DIRECT OPERATED



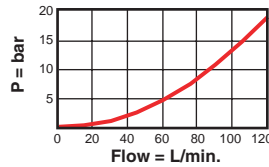
Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	DODS – XHN	T - 21A	34,9	22,2	46	40/50
120 L/min.	DOFS – XHN	T - 22A	34,9	28,6	51	60/70
240 L/min.	DOHS – XHN	T - 23A	46	31,8	63	200/215
480 L/min.	DOJS – XHN	T - 24A	63,5	41,3	81	465/500

Performance Curves

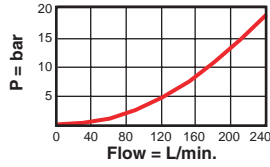
DODS



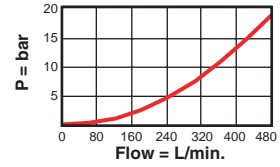
DOFS



DOHS



DOJS



Fully Open Pressure Differential vs. Flow

- Maximum operating pressure = 350 bar (Port 1 and Port 2)
- Minimum pilot pressure to shift valve = DODS: 30 bar, DOFS, DOHS, DOJS: 20 bar,
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Pilot volume for complete shift = DODS: 0,16 c.c., DOFS: 0,33 c.c., DOHS: 0,82 c.c., DOJS: 2,8 c.c.
- Valve will open when the pilot pressure falls below 10 bar.
- Any back pressure at the drain port is directly additive to the required pilot pressure for reliable operation.

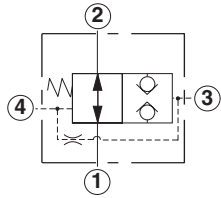
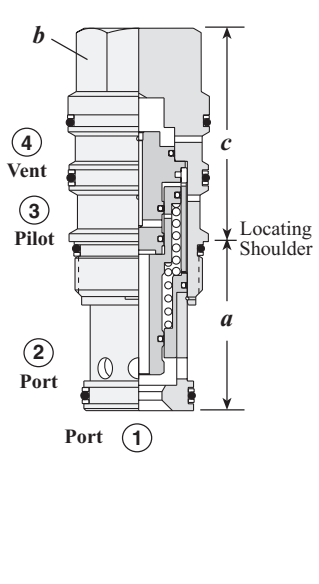
DO * S - * H *

Nominal Capacity	Control**	Control Pressure	Seal
D 60 L/min.	X Non-adjustable	H 14,0 bar	N Buna-N
F 120 L/min.			V Viton
H 240 L/min.			
J 480 L/min.			

** See page 162 for information on Control Options

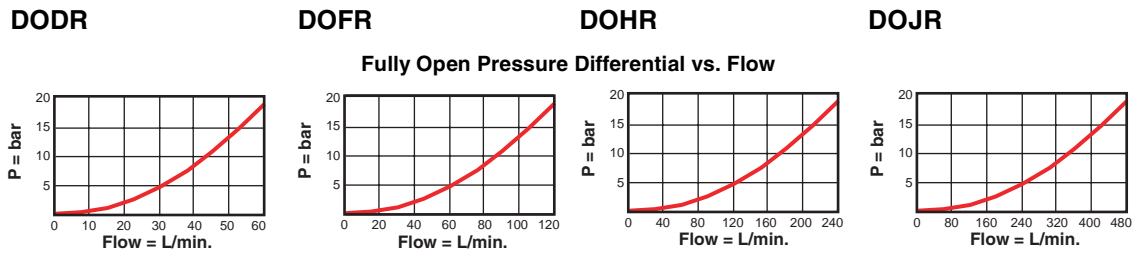
Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

NORMALLY OPEN, VENT-TO-OPERATE



Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	DODR – XHN	T - 21A	34,9	22,2	46	40/50
120 L/min.	DOFR – XHN	T - 22A	34,9	28,6	51	60/70
240 L/min.	DOHR – XHN	T - 23A	46	31,8	63	200/215
480 L/min.	DOJR – XHN	T - 24A	63,5	41,3	81	465/500

Performance Curves



- Maximum operating pressure = 350 bar
- Minimum pilot pressure to shift valve with Port 4 vented to tank = DODR: 30 bar, DOFR, DOHR, DOJR: 20 bar
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Control pilot flow = DODR, DOFR: 0,4 L/min., DOHR, DOJR: 0,6 L/min.
- Valve will open when the pilot pressure falls below 10 bar or with Port 4 blocked.
- Port 4 may be externally connected to a pilot switching valve. The pilot valve should have a leakage rate of less than 10 drops/min. and be able to satisfy the pilot flow requirements. Sun model DAAA-*** solenoid pilot valve is ideal for this application.

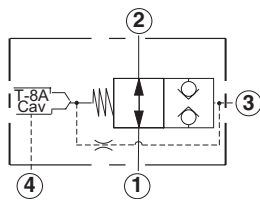
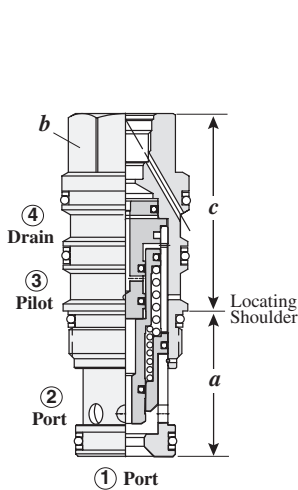
DO * R - * * *

Nominal Capacity	Control**	Control Pressure	Seal
D 60 L/min.	X Non-adjustable	H 14,0 bar	N Buna-N
F 120 L/min.			V Viton
H 240 L/min.			
J 480 L/min.			

** See page 162 for information on Control Options

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

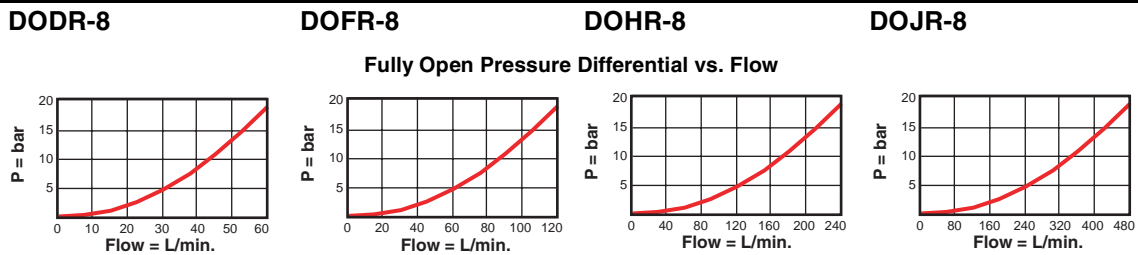
NORMALLY OPEN, VENT-TO-OPERATE WITH INTEGRAL PILOT CONTROL CAVITY



The -8 control option allows a pilot control valve to be incorporated directly into the end of the cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include solenoid, air pilot, and hydraulic pilot operation. See Pilot Control Cartridges on page 121.

Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	DODR - 8HN	T - 21A	34,9	22,2	46	40/50
120 L/min.	DOFR - 8HN	T - 22A	34,9	28,6	51	60/70
240 L/min.	DOHR - 8HN	T - 23A	46	31,8	63	200/215
480 L/min.	DOJR - 8HN	T - 24A	63,5	41,3	81	465/500

Performance Curves



- Maximum operating pressure = 350 bar
- Minimum pilot pressure to shift valve = DODR: 30 bar, DOFR, DOHR, DOJR: 20 bar,
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Control pilot flow = DODR, DOFR: 0,4 L/min., DOHR, DOJR: 0,6 L/min.
- Valve will open when the pilot pressure falls below 10 bar.
- Any back pressure at the drain port is directly additive to the required pilot pressure.
- With the -8 control option, the main stage valve should first be installed to the correct torque value. The T-8A pilot control valve should then be installed into the main stage valve to its required torque value.

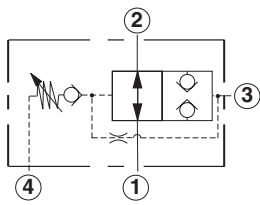
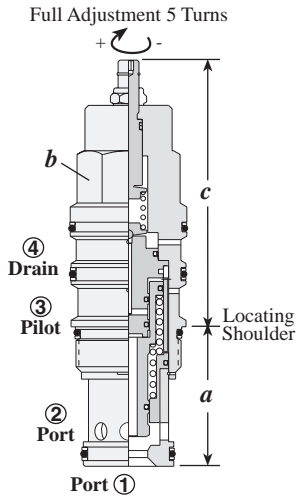
DO ★ R - 8 ★ ★

Nominal Capacity	Control**	Control Pressure	Seal
D 60 L/min.	8 with T-8A cavity in hex body for pilot operation (see pilot control section for alternate options)	H 14,0 bar	N Buna-N
F 120 L/min.			V Viton
H 240 L/min.			
J 480 L/min.			

** See page 162 for information on Control Options

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

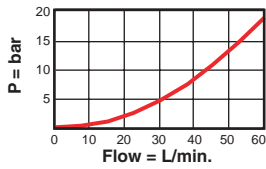
NORMALLY OPEN, PRESSURE ADJUSTABLE



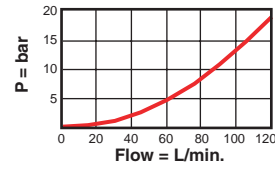
Nominal Capacity	Typical Cartridge Model Code	Cavity	a	b	Cartridge Dimensions			Installation Torque (Nm)
					L	C	K	
60 L/min.	DODP – LAN	T - 21A	34,9	22,2	79	80,0	85,0	40/50
120 L/min.	DOFP – LAN	T - 22A	34,9	28,6	88	89,0	94,0	60/70
240 L/min.	DOHP – LAN	T - 23A	46	31,8	100	101,0	106,0	200/215
480 L/min.	DOJP – LAN	T - 24A	63,5	41,3	122	125,0	128,0	465/500

Performance Curves

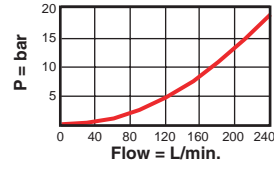
DODP



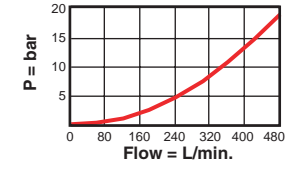
DOFP



DOHP



DOJP



Fully Open Pressure Differential vs. Flow

- Maximum operating pressure = 350 bar
- Minimum pilot pressure to shift valve = DODP: 30 bar, DOFP, DOHP, DOJP: 20 bar,
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Control pilot flow at shift = DODP, DOFP: 0,4 L/min., DOHP, DOJP: 0,6 L/min.
- Valve will open when the pilot pressure drops 85% below setting.
- Any back pressure at the drain port is directly additive to the required pilot pressure.

DO * P - * * *

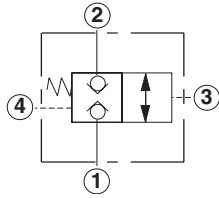
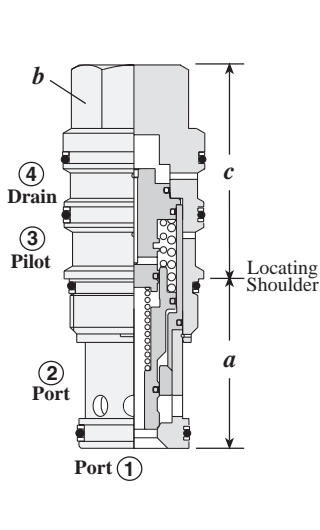
Nominal Capacity	Control**	Nominal Adjustable Shift Pressure Range	Seal
D 60 L/min.	L Standard Screw	A 21 - 210 bar	N Buna-N
F 120 L/min.	C Tamper Resistant	B 21 - 105 bar	V Viton
H 240 L/min.	K Handknob	W 21 - 315 bar	
J 480 L/min.			

** See page 162 for information on Control Options

Customer may specify pressure setting.

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

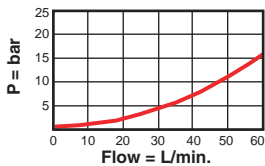
NORMALLY CLOSED, DIRECT OPERATED



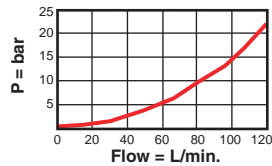
Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	DKDS – XHN	T - 21A	34,9	22,2	46	40/50
120 L/min.	DKFS – XHN	T - 22A	34,9	28,6	51	60/70
240 L/min.	DKHS – XHN	T - 23A	46	31,8	63	200/215
480 L/min.	DKJS – XHN	T - 24A	63,5	41,3	81	465/500

Performance Curves

DKDS

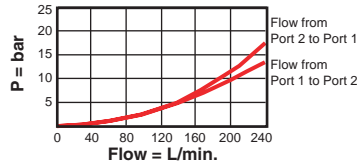


DKFS

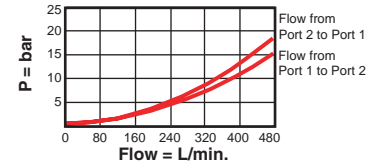


DKHS

Pilot Open Pressure Drop



DKJS



- Maximum operating pressure = 350 bar
- Minimum pilot pressure to shift valve = DKDS: 30 bar, DKFS, DKHS, DKJS: 20 bar,
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Pilot volume for complete shift = DKDS: 0,16 c.c., DKFS: 0,33 c.c., DKHS: 0,82 c.c., DKJS: 2,8 c.c.
- Valve will reset when the pilot pressure drops 85% below setting.
- Any back pressure at the drain port is directly additive to the required pilot pressure.

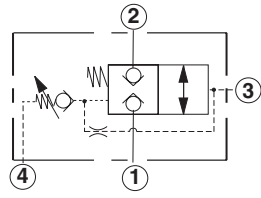
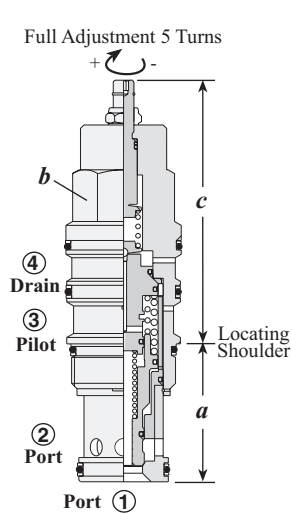
DK ★ S – ★ ★ ★

Nominal Capacity	Control**	Adjustment Range	Seal
D 60 L/min.	X Non-adjustable	H 14,0 bar	N Buna-N
F 120 L/min.			V Viton
H 240 L/min.			
J 480 L/min.			

** See page 162 for information on Control Options

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

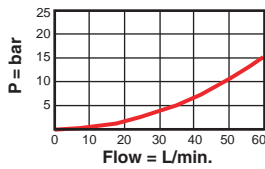
NORMALLY CLOSED, PRESSURE ADJUSTABLE



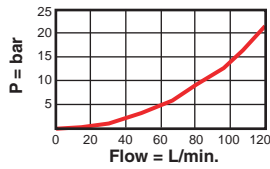
Nominal Capacity	Typical Cartridge Model Code	Cavity	a	b	Cartridge Dimensions			Installation Torque (Nm)
					L	C	K	
60 L/min.	DKDP – LAN	T - 21A	34,9	22,2	79	80,0	85,0	40/50
120 L/min.	DKFP – LAN	T - 22A	34,9	28,6	88	89,0	94,0	60/70
240 L/min.	DKHP – LAN	T - 23A	46	31,8	100	101,0	106,0	200/215
480 L/min.	DKJP – LAN	T - 24A	63,5	41,3	122	125,0	128,0	465/500

Performance Curves

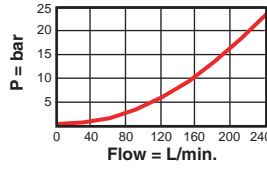
DKDP



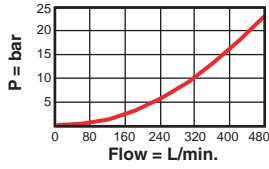
DKFP



DKHP



DKJP



Piloted Open Pressure Drop

- Maximum operating pressure = 350 bar
- Minimum pilot pressure to shift valve = DKDP: 30 bar, DKFP, DKHP, DKJP: 20 bar,
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Control pilot flow at shift = DKDP, DKFP: 0,4 L/min., DKHP, DKJP: 0,6 L/min.
- Any back pressure at the drain port is directly additive to the required pilot pressure.
- Valve will reset when the pilot pressure falls to 85% of the cracking value.

DK ★ P – ★ ★ ★

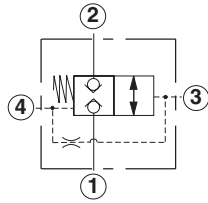
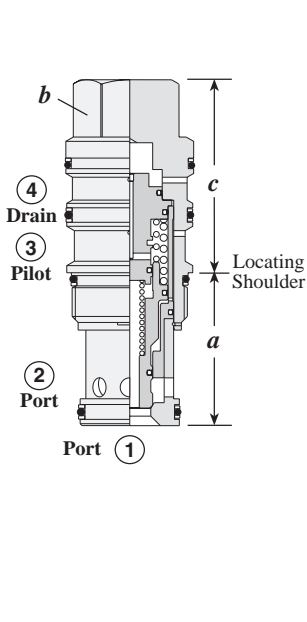
Nominal Capacity	Control**	Nominal Adjustable Shift Pressure Range	Seal
D 60 L/min.	L Standard Screw	A 21 - 210 bar	N Buna-N
F 120 L/min.	C Tamper Resistant	B 21 - 105 bar	V Viton
H 240 L/min.	K Handknob	W 21 - 315 bar	
J 480 L/min.			

** See page 162 for information on Control Options

Adjustment Range Options:
A, B, and W are standard set at 70 bar.
Customer may specify pressure setting.

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

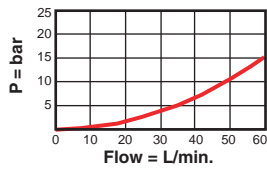
NORMALLY CLOSED, VENT-TO-OPERATE



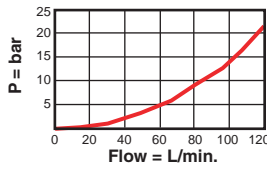
Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	DKDR – XHN	T - 21A	34,9	22,2	46	40/50
120 L/min.	DKFR – XHN	T - 22A	34,9	28,6	51	60/70
240 L/min.	DKHR – XHN	T - 23A	46	31,8	63	200/215
480 L/min.	DKJR – XHN	T - 24A	63,5	41,3	81	465/500

Performance Curves

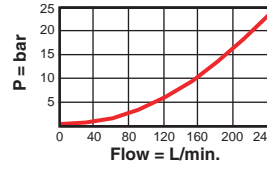
DKDR



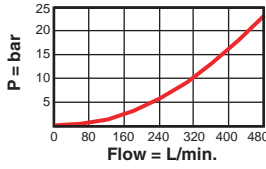
DKFR



DKHR



DKJR



Piloted Open Pressure Drop

- Maximum operating pressure = 350 bar
- Minimum pilot pressure to shift valve with Port 4 vented to tank = DKDR: 30 bar, DKFR, DKHR, DKJR: 20 bar.
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Control pilot flow = DKDR, DKFR: 0,4 L/min., DKHR, DKJR: 0,6 L/min.
- Valve will reseat when the pilot pressure falls below 10 bar.
- Port 4 may be externally connected to a pilot switching valve. The pilot valve should have a leakage rate of less than 10 drops/min. and be able to satisfy the pilot flow requirements. Sun model DAAA-*** solenoid pilot valve is ideal for this application.

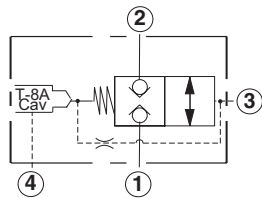
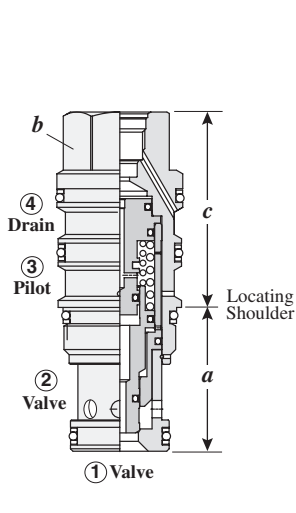
DK ★ R – ★ ★ ★

Nominal Capacity	Control**	Nominal Shift Pressure	Seal
D 60 L/min.	X Non-adjustable	H 14,0 bar	N Buna-N
F 120 L/min.			V Viton
H 240 L/min.			
J 480 L/min.			

** See page 162 for information on Control Options

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.

NORMALLY CLOSED, VENT-TO-OPERATE WITH INTEGRAL PILOT CONTROL CAVITY

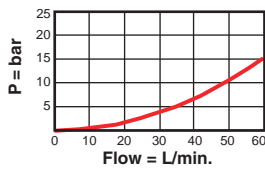


The -8 control option allows a pilot control valve to be incorporated directly into the end of the cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional, solenoid, air pilot, and hydraulic pilot operation. See Pilot Control Cartridges on page 121.

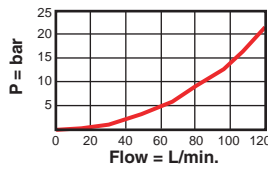
Nominal Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	DKDR – 8H*	T - 21A	34,9	22,2	46	40/50
120 L/min.	DKFR – 8H*	T - 22A	34,9	28,6	51	60/70
240 L/min.	DKHR – 8H*	T - 23A	46	31,8	63	200/215
480 L/min.	DKJR – 8H*	T - 24A	63,5	41,3	81	465/500

Performance Curves

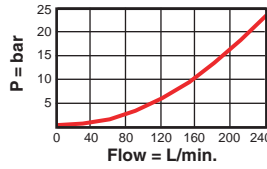
DKDR-8



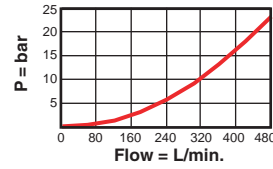
DKFR-8



DKHR-8



DKJR-8



Piloted Open Pressure Drop

- Maximum operating pressure = 350 bar
- Minimum pilot pressure to shift valve with Port 4 vented to tank = DKDR: 30 bar, DKFR, DKHR, DKJR: 20 bar
- Maximum valve leakage, Port 1 to Port 2 or Port 2 to Port 1 = 0,4 cc/min.
- Control pilot flow = DKDR, DKFR: 0,4 L/min, DKHR, DKJR: 0,6 L/min.
- Valve will open when the pilot pressure falls below 10 bar.
- Any back pressure at the drain port is directly additive to the required pilot pressure for reliable operation.
- With the -8 control option, the main stage valve should first be installed to the correct torque value. The T-8A pilot control valve should then be installed into the main stage valve to its required torque value.

DK * R - 8 * *

Nominal Capacity	Control**	Nominal Shift Pressure	Seal
D 60 L/min.	8 with T-8A cavity in hex body for pilot operation (see pilot control section for alternate options)	H 14,0 bar	N Buna-N
F 120 L/min.			V Viton
H 240 L/min.			
J 480 L/min.			

** See page 162 for information on Control Options

Visit www.sunhydraulics.com for detailed and complete technical information on our full line of products.