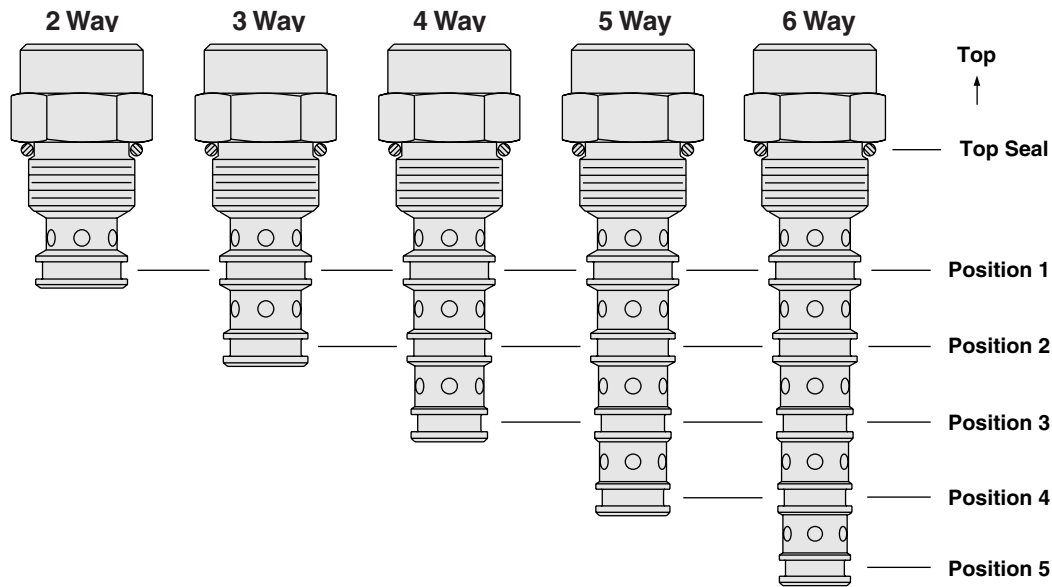


Seal Kit Installation & Ordering Guide

O-RING/BACKUP RING POSITION



STANDARD O-RING SIZES

Cavity Size	Type	Top Seal	Position 1	Position 2	Position 3	Position 4	Position 5
08	2-Way	-908	-012	—	—	—	—
	3-Way	-908	-014	-013	—	—	—
	4-Way	-908	-014	-013	-012	—	—
10	2-Way	-910	-014	—	—	—	—
	3-Way	-910	-015	-014	—	—	—
	3-Way Short	-910	-015	-014	—	—	—
	3-Way Long	-910	-015	-014	—	—	—
	4-Way	-910	-016	-015	-014	—	—
	5-Way	-910	-116	-015	-014	-013	—
	6-Way	-910	-116	-015	-014	-013	-012
12	2-Way	-912	-115	—	—	—	—
	2-Way Long	-912	-115	—	—	—	—
	3-Way	-912	-019	-018	—	—	—
	4-Way	-912	-019	-018	-017	—	—
	5-Way Short	-912	-019	-018	-017	-016	—
	6-Way Short	-912	-019	-018	-017	-016	-015
	6-Way Long	-912	-019	-018	-017	-016	-015
16	2-Way	-916	-119	—	—	—	—
	3-Way Short	-916	-119	-117	—	—	—
	3-Way	-916	-119	-117	—	—	—
	4-Way	-916	-119	-118	-117	—	—
	5-Way Short	-916	-125	-119	-118	-117	—
	6-Way Short	-916	-125	-119	-118	-117	-116
20	3-Way Short	M2.9	-122	-124	—	—	—
42	4-Way Metric	M2.4 x 38.6	-125	M2.4 x 31.6	M2.4 x 29.6	—	—
	6-Way Metric	-131	-125	M2.4 x 31.6	M2.4 x 29.6	M2.9 x 38.6	M2.4 x 27.6
98	3-Way Metric	M1.5 x 21.5	M2.2 x 18.0	M1.6 x 15.1	M1.6 x 14.1	—	—

Seal Kit information continued on following page.

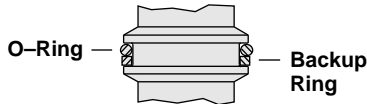
HOUSINGS AND ACCESSORY PRODUCTS

Seal Kit Installation & Ordering Guide

O-RING/BACKUP RING INSTALLATION

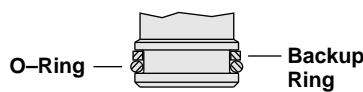
Installation Type T

O-Ring installed toward top of cavity



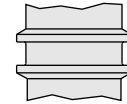
Installation Type B

O-Ring installed toward bottom of cavity



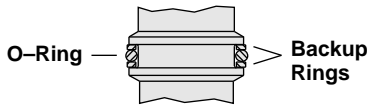
Installation Type X

No seals this location



Installation Type M

O-Ring installed between backups



Installation Type O

O-Ring only; no back-ups



Note: Cartridges which are originally built with polyester elastomer (black) back-up rings, are serviced with single-turn (white) Fluorocarbon back-up rings. This facilitates field installation of the back-up rings, since the original production rings require special tools for installation.

Type "M" back-up rings are 1/2 size single-turn Fluorocarbon rings on all cavities **except** VC12-3, VC12-4, VC16-S3, VC20-S3 and VC98-3.

Temperature Considerations: As per ASTM Standard D2000/SAE J200 Standard Buna N (standard) seals are designed for applications that operate within the -40°C to 100°C (-40° to 212°F) temperature range. Maximum temperature for optimum seal life is 107°C with reduced life if operated within the 107°C to 120°C range. Fluorocarbon (V) seals should be used for applications with an average temperature range between -26°C to 204°C (-15°F to 400°F). Polyurethane (P) seals should be used for applications with an average temperature range between 104°C to -54°C (-65°F to 225°F). PPDI (U) seals should be used for applications with an average temperature range between 135°C to -54°C (-65°F to 275°F)."

ORDERING INFORMATION

Cavity Thread Size		Cavity Type		Seals		Position 1 Installation Type (Required for 2, 3, 4, 5 & 6-Way Valves)		Position 2 Installation Type (Required for 3, 4, 5 & 6-Way Valves)		Position 3 Installation Type (Required for 4, 5 & 6-Way Valves)		Position 4 Installation Type (Required for 5 & 6-Way Valves)		Position 5 Installation Type (Required for 6-Way Valves Only)	
7/16-20	04	2-Way	2	Buna N (Std.)	N	O-Ring toward top of cavity	T	O-Ring toward top of cavity	T	O-Ring toward top of cavity	T	O-Ring toward top of cavity	T	O-Ring toward top of cavity	T
5/8-18	07	3-Way	3	Fluorocarbon	V	O-Ring between backups	M	O-Ring between backups	M	O-Ring between backups	M	O-Ring between backups	M	O-Ring between backups	M
3/4-16	08	3-Way Short	S3	Polyurethane	P	O-Ring toward bottom of cavity	B	O-Ring toward bottom of cavity	B	O-Ring toward bottom of cavity	B	O-Ring toward bottom of cavity	B	O-Ring toward bottom of cavity	B
	38	4-Way	4	PPDI Urethane	U	O-Ring; no back-ups	O	O-Ring; no back-ups	O	O-Ring; no back-ups	O	O-Ring; no back-ups	O	O-Ring; no back-ups	O
	58	5-Way	5			No seals this location	X	No seals this location	X	No seals this location	X	No seals this location	X	No seals this location	X
	78	6-Way	6												
7/8-14	10														
	50														
	70														
	80														
1-1/16-12	12														
	52														
	72														
1-5/16-12	16														
	56														
1-5/8-12	20														
M42 x 2.0	42														