



Hydromatik Uchida Rexroth A7V Pump

Series 2.0, and 5.1, axial piston unit, bent axis design

Size 20 to 500, high pressure range up to 40MPa (400 bar)



Variable displacement pump, axial piston bent axis design, for hydrostatic transmissions in open circuits.

The flow is proportional to the drive speed and the displacement and is steplessly variable at constant drive speed.

Comprehensive program of control devices for every control and regulating function.

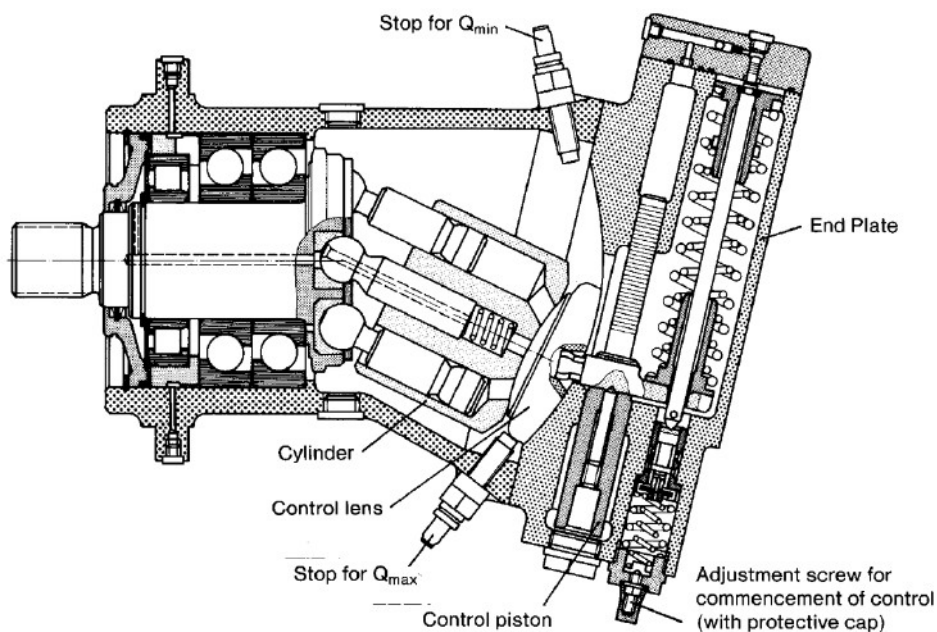
Simplified high performance rotary group with enhanced technical data and well-proven spherical control area.

Robust roller bearings for high loads.

Hydrostatic unloading of bearings possible for continuous pressures up to 400 bar.

Operation on both mineral and fire-resistant fluids.

Improved port plate design and compact construction reduces noise level by 5 dBA





A7V 55 LV 2.0 L Z F O O

Axial piston variable displacement pump

Auxiliary equipment
None
With pressure cut-off built-on for LV, EL and HD

O
D

Size

0-20.5	20
8.1-28.1	28
0-40.1	40
15.8-54.8	55
0-58	58
23.1-80	80
0-78	78
30.8-107	107
0-117	117
46.2-160	160
0-250	250
0-355	355
0-500	500

Constant pressure control remote controlled (order sequence valve and subplate separately)

F

Stroke limiter

None
Mechanically adjustable (for LV and DR)

O
M

Displacement $V_{gmin.} - V_{gmax.}$ ml/rev.

Pipe connections
Pressure and suction ports SAE-flanges, on side
Pressure and suction ports thread connection.

F
G

Control devices

Constant horsepower control LV

Constant pressure control DR

Electric control (with proportional valve) EL

Hydraulic control pressure related HD

Manual control (with handwheel) MA

Brake control SC

Numerical control NC

Shaft end

Splined shaft DIN 5480
Splined shaft GB3478.1-83
Parallel keyed shaft GB1096-79

Z
S
P

Direction of Rotation

Right (clockwise)
Left (anti-clockwise)
(viewed on shaft end)

R
L

Series

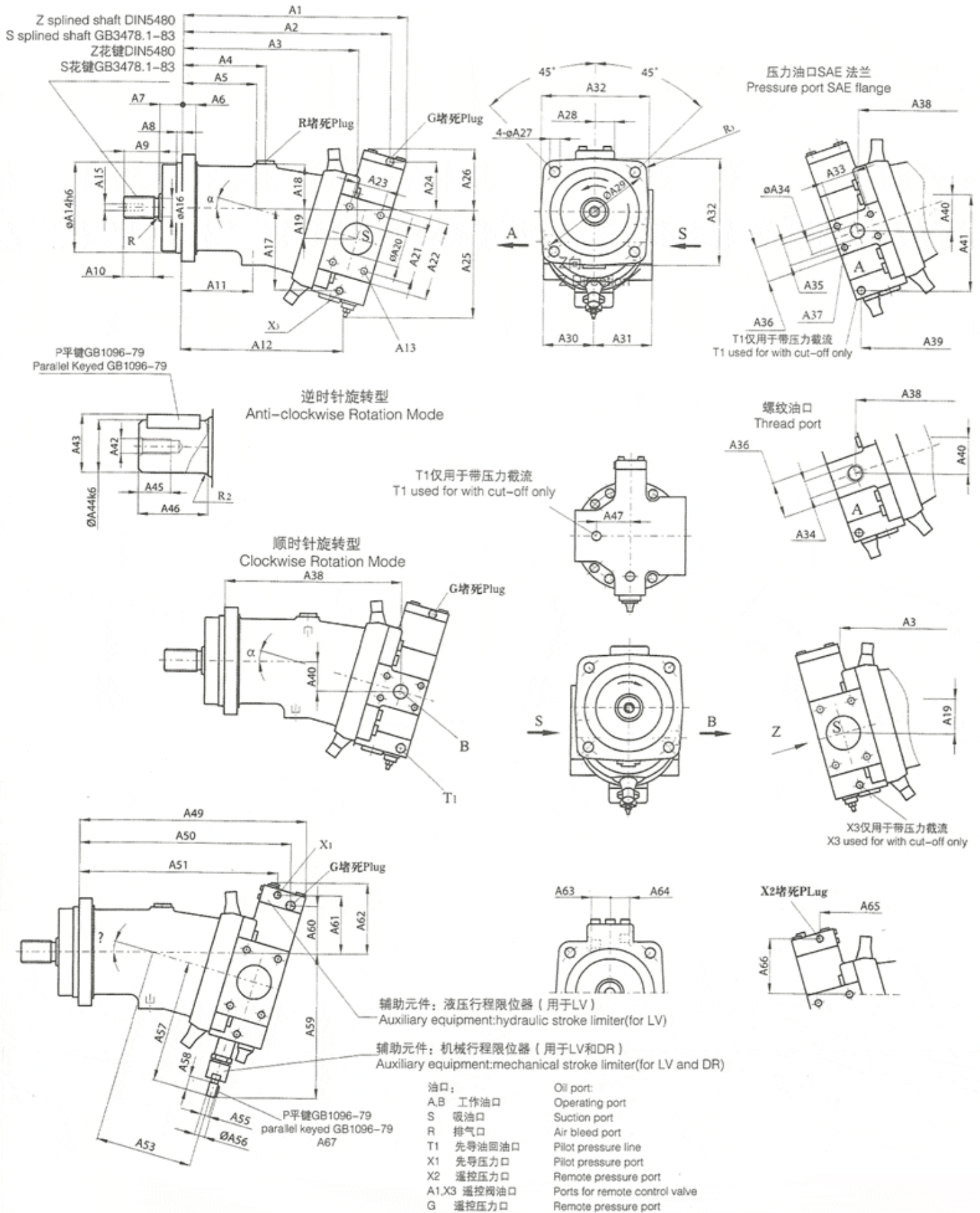
2.0
5.1

Ordering sample: A7V55-LV-2.0-L-Z-F-OO

Axial piston variable hydraulic pump A7V, series 55, with constant horsepower control, series 2.0 anti-clockwise rotation, splined shaft SAE side flange connections, without auxiliary equipment.

元件外形尺寸 系列2.0规格20-160 Unit Dimensions Series 2.0 size 20-160

恒功率控制LV Constant horsepower control LV

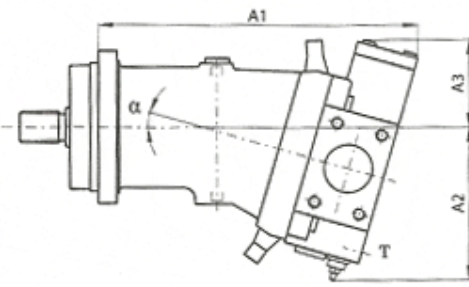


A7V变量柱塞泵 Variable displacement plump A7V

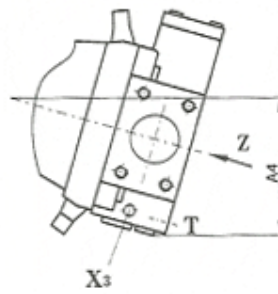
元件外形尺寸 系列2.0 规格20-160 Unit Dimensions Series 2.0 size 20-160

恒压控制DR Constant pressure Control DR

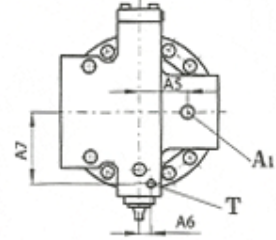
标准型 Standrad Model



遥控器 Remote Model



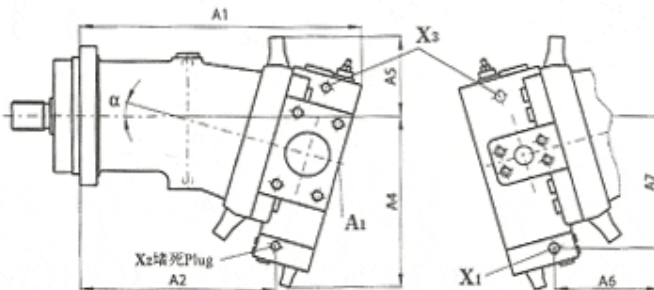
Z向 Z Direction



规格20 A1和X3仅用于带压力截流者
其余规格 A1和X3用于遥控
Size 20 A1 and X3 use for with pressure cut-off only
Other sizes A1 and X3 used for remote control

规格 Size	α°	A1	A2	A3	A4	A5	A6	A7
20	9	251	134	95	106	38	-	-
40	9	315	166	107	127	40	14	53
58	9	372	160	107	138	62	15	69
78	9	380	180	114	147	60	14	70
107	9	441	199	132	165	65	14	83

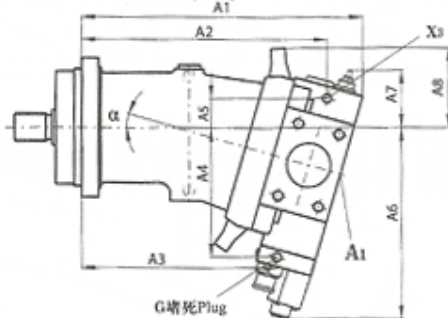
液压控制HD Hydraulic control HD



A1和 X3仅用于带压力截流者
A1 and X3 used for with pressure cut-off only

规格 Size	α°	A1	A2	A3	A4	A5	A6	A7
20	9	248	175	132	182	75	190	147
28	16	253	158	143	195	75	172	160
40	9	312	236	151	206	110	233	166
55	16	318	217	166	220	84	212	180
58	9	367	287	158	213	110	285	170
80	16	373	266	175	232	105	263	186
78	9	375	292	107	225	122	290	182
107	16	382	270	188	245	106	266	200
117	9	634	333	188	250	132	331	200
160	16	442	308	209	272	114	305	220

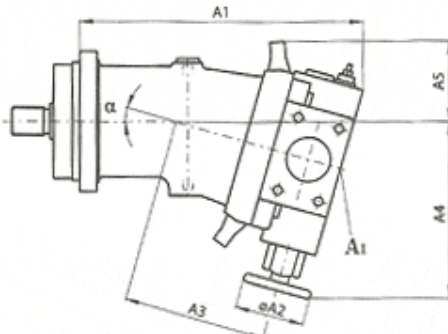
电气比例控制EL Electric proportional Control EL



规格20 A1和X3仅用于带压力截流者
其余规格 A1和X3用于遥控
Size 20 A1 and X3 used for with pressure cut-off only
Other sizes A1 and X3 used for remote control

规格 Size	α°	A1	A2	A3	A4	A5	A6	A7	A8
20	9	248	182	144	113	54	216	75	91
28	16	252	188	130	121	41	229	75	-
40	9	312	267	201	130	49	234	-	110
55	16	318	271	184	140	29	249	-	-
58	9	367	320	249	141	52	245	110	84
80	16	373	325	231	154	29	264	105	-
78	9	374	325	254	153	55	257	122	-
107	16	381	330	234	167	31	277	106	-
117	9	434	381	294	172	64	249	132	-
160	16	442	387	272	187	36	298	114	-

手动控制MA Manual Control MA

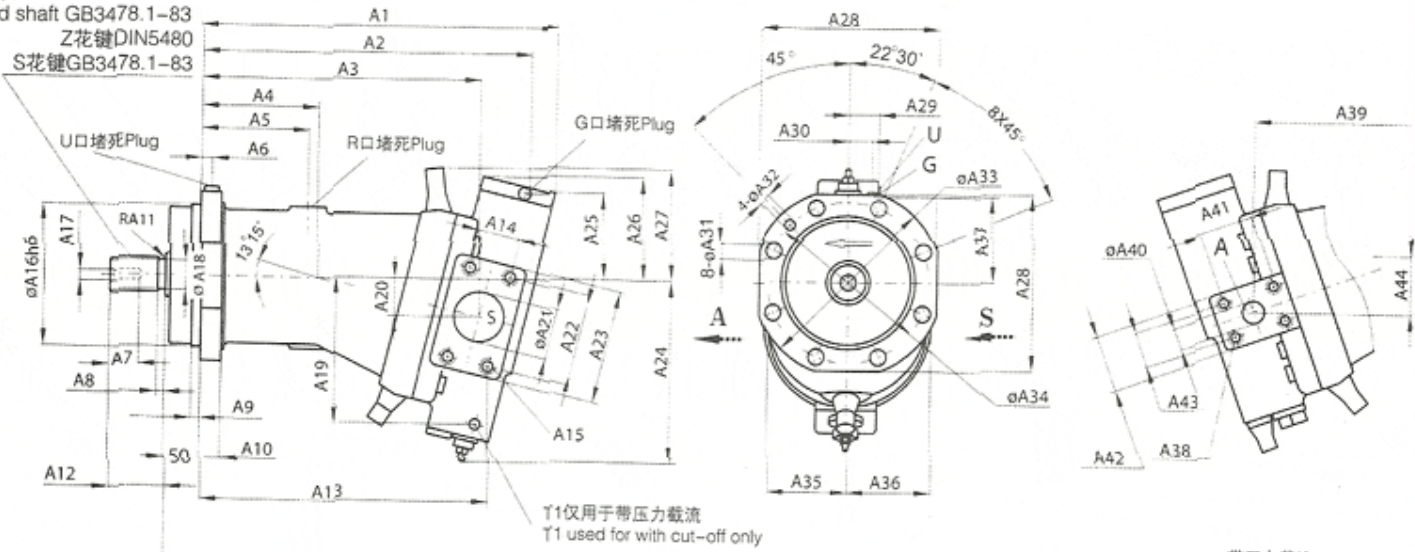


规格 Size	α°	A1	A2	A3	A4	A5
20	9	251	100	108	175	95
28	16	260	100	108	190	80
40	9	315	102	134	197	107
55	16	323	102	134	215	89
58	9	372	102	155.5	215	107
80	16	380	102	155.5	235	86
78	9	380	125	169	246	114
107	16	390	125	169	270	92
117	9	441	125	192	261	132
160	16	450	125	192	285	107

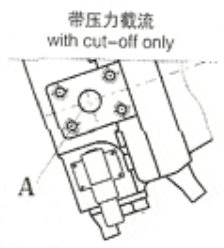
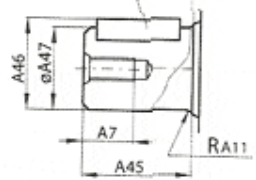
元件外形尺寸 系列5.1 规格250-500 Unit dimensions Series 5.1 size 250-500

恒功率控制LV Constant pressure Control LV

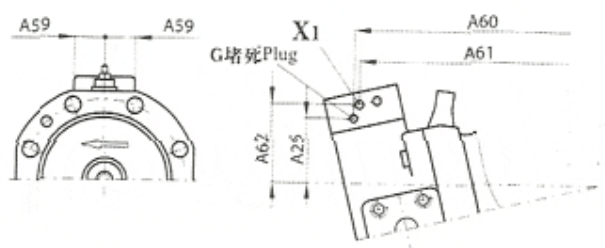
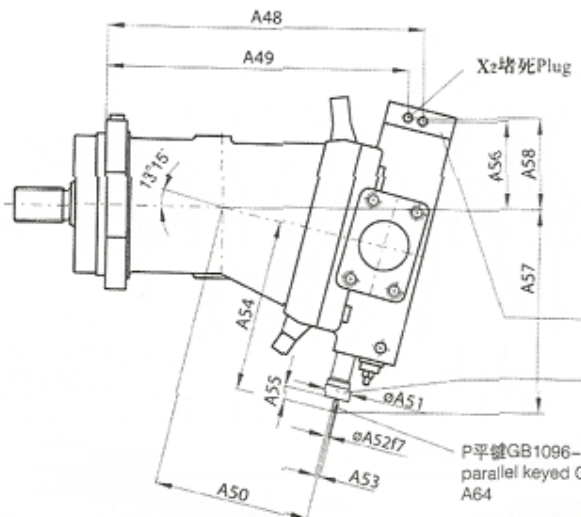
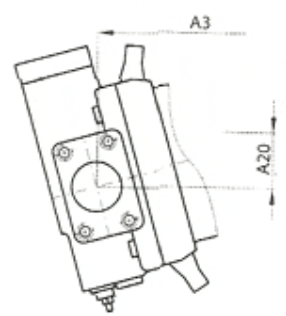
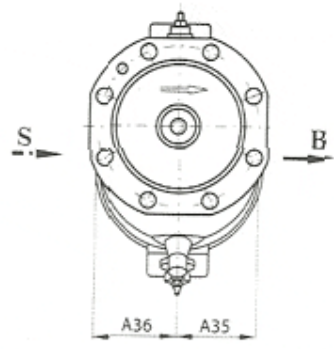
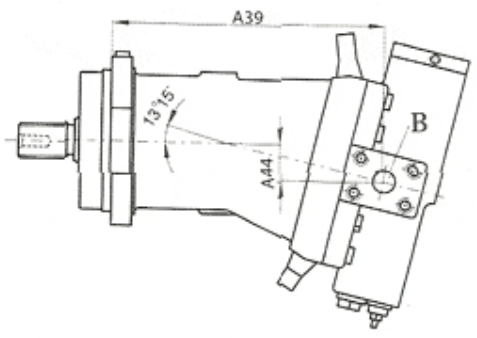
Z splined shaft DIN5480
S splined shaft GB3478.1-83
Z花键DIN5480
S花键GB3478.1-83



P平键GB1096-79 逆时针旋转型
Parallel Keyed GB1096-79 Anti-clockwise Rotation Mode



顺时针旋转型
Clockwise Rotation Mode



Details model of Hydromatik Uchida Rexroth A7V Pump				
A7V20LV2.0LZF00	A7V20LV2.0RZF00	A7V78MA2.0LZF00	A7V78MA2.0RZF00	A7V160HD2.0LZF00
A7V28LV2.0LZF00	A7V28LV2.0RZF00	A7V107MA2.0LZF00	A7V107MA2.0RZF00	A7V20MA2.0LZF00
A7V40LV2.0LZF00	A7V40LV2.0RZF00	A7V117MA2.0LZF00	A7V117MA2.0RZF00	A7V28MA2.0LZF00
A7V55LV2.0LZF00	A7V55LV2.0RZF00	A7V160MA2.0LZF00	A7V160MA2.0RZF00	A7V40MA2.0LZF00
A7V58LV2.0LZF00	A7V58LV2.0RZF00	A7V20SC2.0LZF00	A7V20SC2.0RZF00	A7V55MA2.0LZF00
A7V80LV2.0LZF00	A7V80LV2.0RZF00	A7V28SC2.0LZF00	A7V28SC2.0RZF00	A7V58MA2.0LZF00
A7V78LV2.0LZF00	A7V78LV2.0RZF00	A7V40SC2.0LZF00	A7V40SC2.0RZF00	A7V80MA2.0LZF00
A7V107LV2.0LZF00	A7V107LV2.0RZF00	A7V55SC2.0LZF00	A7V55SC2.0RZF00	A7V500SC5.1LZF00
A7V117LV2.0LZF00	A7V117LV2.0RZF00	A7V58SC2.0LZF00	A7V58SC2.0RZF00	A7V58NC5.1LZF00
A7V160LV2.0LZF00	A7V160LV2.0RZF00	A7V80SC2.0LZF00	A7V80SC2.0RZF00	A7V160HD2.0RZF00
A7V20DR2.0LZF00	A7V20DR2.0RZF00	A7V78SC2.0LZF00	A7V78SC2.0RZF00	A7V20MA2.0RZF00
A7V28DR2.0LZF00	A7V28DR2.0RZF00	A7V107SC2.0LZF00	A7V107SC2.0RZF00	A7V28MA2.0RZF00
A7V40DR2.0LZF00	A7V40DR2.0RZF00	A7V117SC2.0LZF00	A7V117SC2.0RZF00	A7V40MA2.0RZF00
A7V55DR2.0LZF00	A7V55DR2.0RZF00	A7V160SC2.0LZF00	A7V160SC2.0RZF00	A7V55MA2.0RZF00
A7V58DR2.0LZF00	A7V58DR2.0RZF00	A7V20NC2.0LZF00	A7V20NC2.0RZF00	A7V58MA2.0RZF00
A7V80DR2.0LZF00	A7V80DR2.0RZF00	A7V28NC2.0LZF00	A7V28NC2.0RZF00	A7V80MA2.0RZF00
A7V78DR2.0LZF00	A7V78DR2.0RZF00	A7V40NC2.0LZF00	A7V40NC2.0RZF00	A7V500SC5.1RZF00
A7V107DR2.0LZF00	A7V107DR2.0RZF00	A7V55NC2.0LZF00	A7V55NC2.0RZF00	A7V58NC5.1RZF00
A7V117DR2.0LZF00	A7V117DR2.0RZF00	A7V58NC2.0LZF00	A7V58NC2.0RZF00	A7V500HD5.1LZF00
A7V160DR2.0LZF00	A7V160DR2.0RZF00	A7V80NC2.0LZF00	A7V80NC2.0RZF00	A7V58MA5.1LZF00
A7V20EL2.0LZF00	A7V20EL2.0RZF00	A7V78NC2.0LZF00	A7V78NC2.0RZF00	A7V250MA5.1LZF00
A7V28EL2.0LZF00	A7V28EL2.0RZF00	A7V107NC2.0LZF00	A7V107NC2.0RZF00	A7V355MA5.1LZF00
A7V40EL2.0LZF00	A7V40EL2.0RZF00	A7V117NC2.0LZF00	A7V117NC2.0RZF00	A7V500MA5.1LZF00
A7V55EL2.0LZF00	A7V55EL2.0RZF00	A7V160NC2.0LZF00	A7V160NC2.0RZF00	A7V58SC5.1LZF00
A7V58EL2.0LZF00	A7V58EL2.0RZF00	A7V58LV5.1LZF00	A7V58LV5.1RZF00	A7V250SC5.1LZF00
A7V80EL2.0LZF00	A7V80EL2.0RZF00	A7V250LV5.1LZF00	A7V250LV5.1RZF00	A7V355SC5.1LZF00
A7V78EL2.0LZF00	A7V78EL2.0RZF00	A7V355LV5.1LZF00	A7V355LV5.1RZF00	A7V500HD5.1RZF00
A7V107EL2.0LZF00	A7V107EL2.0RZF00	A7V500LV5.1LZF00	A7V500LV5.1RZF00	A7V58MA5.1RZF00
A7V117EL2.0LZF00	A7V117EL2.0RZF00	A7V58DR5.1LZF00	A7V58DR5.1RZF00	A7V250MA5.1RZF00
A7V160EL2.0LZF00	A7V160EL2.0RZF00	A7V250DR5.1LZF00	A7V250DR5.1RZF00	A7V355MA5.1RZF00
A7V20HD2.0LZF00	A7V20HD2.0RZF00	A7V355DR5.1LZF00	A7V355DR5.1RZF00	A7V500MA5.1RZF00
A7V28HD2.0LZF00	A7V28HD2.0RZF00	A7V500DR5.1LZF00	A7V500DR5.1RZF00	A7V58SC5.1RZF00
A7V40HD2.0LZF00	A7V40HD2.0RZF00	A7V58EL5.1LZF00	A7V58EL5.1RZF00	A7V250SC5.1RZF00
A7V55HD2.0LZF00	A7V55HD2.0RZF00	A7V250EL5.1LZF00	A7V250EL5.1RZF00	A7V355SC5.1RZF00
A7V58HD2.0LZF00	A7V58HD2.0RZF00	A7V355EL5.1LZF00	A7V355EL5.1RZF00	A7V117HD2.0LZF00
A7V80HD2.0LZF00	A7V80HD2.0RZF00	A7V500EL5.1LZF00	A7V500EL5.1RZF00	A7V117HD2.0RZF00
A7V78HD2.0LZF00	A7V78HD2.0RZF00	A7V58HD5.1LZF00	A7V58HD5.1RZF00	A7V355HD5.1LZF00
A7V107HD2.0LZF00	A7V107HD2.0RZF00	A7V250HD5.1LZF00	A7V250HD5.1RZF00	A7V355HD5.1RZF00