



Hydraulic Steering Units 10 Series

Hydraulic Steering Unit 10 series is integral hydraulic steering unit, the valve body of rotary valve is integral structure, then the steering unit can integrate with cartridge valve, such as the pressure control valve of the integral system.

Hydraulic Steering Unit 10 series is widely used in the steering control system of different kinds of engineering vehicles, such as the steering system of many kinds of industrial and agricultural mobile machinery forklift, loader, road roller, tractor, combine harvester, and the ship helm etc. The steering unit can control the steering cylinder with bigger resistance force by inputting minor force; It's easier, flexible and reliable; The integral check valve can prevent the system pressure oil from anti-vibration, and prevent from "hit-hand" during the steering operation; Integral pressure control valve can control the operation pressure and the shock pressure of the steering system.

The mounting dimensions of Hydraulic Steering Unit 10 series are consistent with the international standard. According to the structure of gerotor set, Hydraulic Steering Unit 10 series can be divided into 2 series: 6/7 teeth structure steering unit and 4/5 teeth structure steering unit.

Hydraulic steering unit with 6/7 teeth structure: according to the size, this series may be divided into 101,102,103 series (among these series, the mounting dimension of 102 series is consistent with that of BZZ series; Hydraulic steering unit with 4/5 teeth structure: it's defined as 109 series; according to special requirement of special customers, then we develop 119 and 129 series on the base of 109 series.

10 series SCU integrate inlet check Valve; Each series may be divided into 2 series acording to the steering unit integrating cartridge calve or not, SCU without valve and SCU with S,SCU without valve doesn't integrate pressure valve, SCU with s integrates pressure valve As for open center non reaction steering unit, "1" represents the SCU with relief valve and shock valves, "4" represents the SCU with relief valve. Please consult P13 for the introduction of 101 series, 102 and 103 series, while P47 for 109 series.

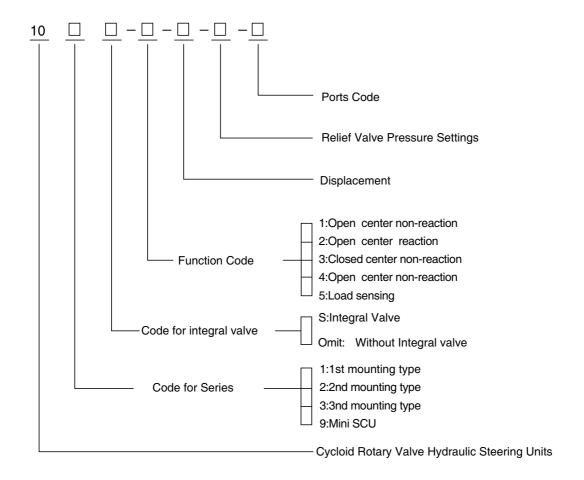






Hydraulic Steering Units 10 Series

Order Code



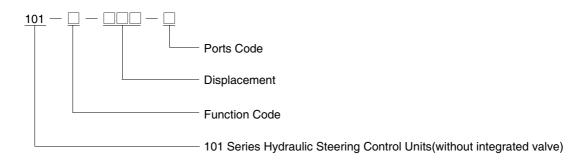




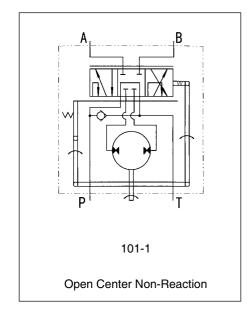


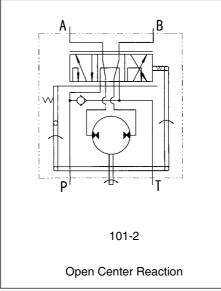
101-1,2,3 Series Hydraulic Steering Control Units (SCU)

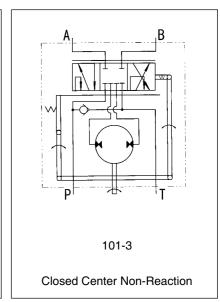
Order Code



Function Code











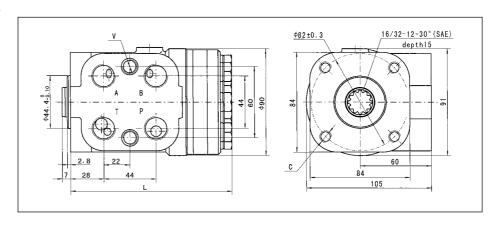


101-1,2,3 Series Hydraulic Steering Control Units (SCU)

Main Specification

Parameters	Type 101-*-**										
Function Code	1,2,3										
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400
Rated flow (L/min)	5	6	8	10	12.5	16	20	25	28	31.5	40
Max. input pressure (MPa)	17.5										
Max. cont. back pressure (MPa)	2.5										
Weight (kg)	5.70	5.76	5.84	5.91	6.05	6.25	6.45	6.68	6.86	7.06	7.45
Dimension L (mm)	130	132	134	137	140	145	150	156	161	166	176

Mounting Data



Ports Threads

		T			
Code	Ports P,T,A,B	Column Mounting C	Valve Mounting V		
Α	M20×1.5				
В	M20×1.5 O-ring		M40		
С	M18×1.5		M12		
D	M18×1.5 O-ring				
Е	G1/2	M10			
U	G1/2 O-ring		M10×1		
G	M22×1.5		M12		
Q	M22×1.5 O-ring				
М					
F	1	3/8-16 UNC	3/8-24 UNF		
I	3/4-16UNF O-ring	M10			
N		M10×1.25	M10		

Note 1: Ports P,T,A,B Depth : 14 mm; Column Mounting C & V Depth: 16 mm.

Note 2: The code of other ports dimensions will be listed in an agreement.







101-1,2,3 Series Hydraulic Steering Control Units (SCU)

Order Code

		Pos.1		Pos.2	Pos.3		
101	_	*	_	***	_	*	

Pos.1 **Function Code**

> 1: 1:Open Center Non-Reaction

2: 2:Open Center Reaction

3:Closed Center Non-Reaction

Displacement mL/r Pos.2

50、63、80、100、125、160、200、250、280、315、400

Pos.3 Ports Code

 $\mathsf{A},\;\mathsf{B},\;\mathsf{C},\;\mathsf{D},\;\mathsf{E},\;\mathsf{U},\;\mathsf{G},\;\mathsf{Q},\;\mathsf{M},\;\mathsf{F},\;\mathsf{I},\;\mathsf{N}$

101 125mL/r G1/2

M10 101-1-125-E For example: Order code 101-1 - 125 - E

> Ports:P,T,A,B G1/2; Column Mounting Thread-C M10 Displacement: 125 mL/r Open Center Non-Reaction



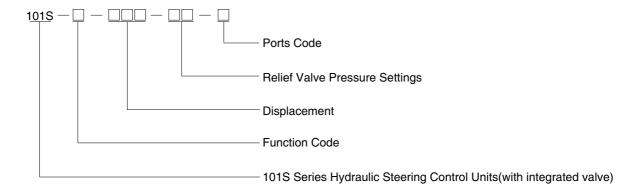




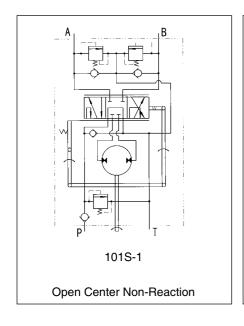
101S-1,2,4 Series Hydraulic Steering Control Units (SCU)

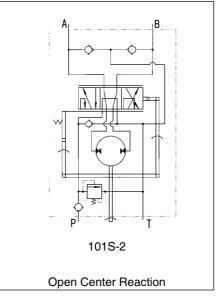
SCU 101S-1,2,4 series inherits the steering function of 101 series both in the structure and in the principle. The feature of 101S series is to have the following valves functions incorporated inside one housing as follows: the relief valve, the shock valves, the suction valves and the check valve according to the different requirement upon the base of the 101 series . This kind of structure is more compact, and it's more convenient in operation.

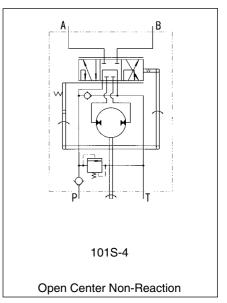
Order Code



Function Code











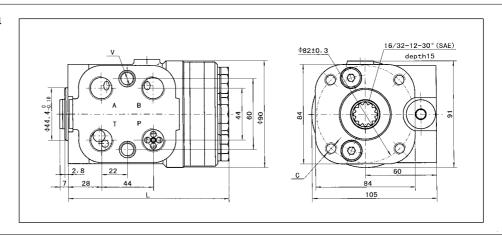


101S-1,2,4 Series Hydraulic Steering Control Units (SCU)

Main Specification

Parameters					Туре	101S-*-	***-**-*				
Function Code		1,2,4 1,4									
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400
Rated flow (L/min)	5	6	8	10	12.5	16	20	25	28	32	40
Max. input pressure (MPa)	17.5										
Relief Valve Pressure Settings (MPa)		06,07,08,10,12,14,15,16,17.5									
Shock Valves Pressure Settings (MPa)	12,13,14,16,18,20,21,22,23.5										
Max. cont. back pressure (MPa)	2.5										
Weight (kg)	5.75	5.81	5.89	5.96	6.1	6.3	6.5	6.73	6.91	7.1	7.5
Dimension L (mm)	130	132	134	137	140	145	150	156	161	166	176

Mounting Data



Ports Threads

Code	Ports P,T,A,B	Column Mounting C	Valve Mounting V		
Α	M20×1.5				
В	M20×1.5 O-ring		M12		
С	M18×1.5		IVITZ		
D	M18×1.5 O-ring				
E	G1/2	M10	M10×1		
U	G1/2 O-ring				
М			M12		
F	0/4 401 N 5 0 :	3/8-16 UNC	3/8-24 UNF		
- 1	3/4-16UNF O-ring	M10	- M10		
N		M10×1.25			

Note 1: Ports P,T,A,B Depth: 14 mm; Column Mounting C & V Depth: 16 mm.

Note 2: The code of other ports dimensions will be listed in an agreement.

