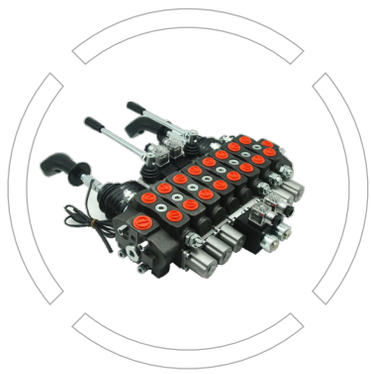
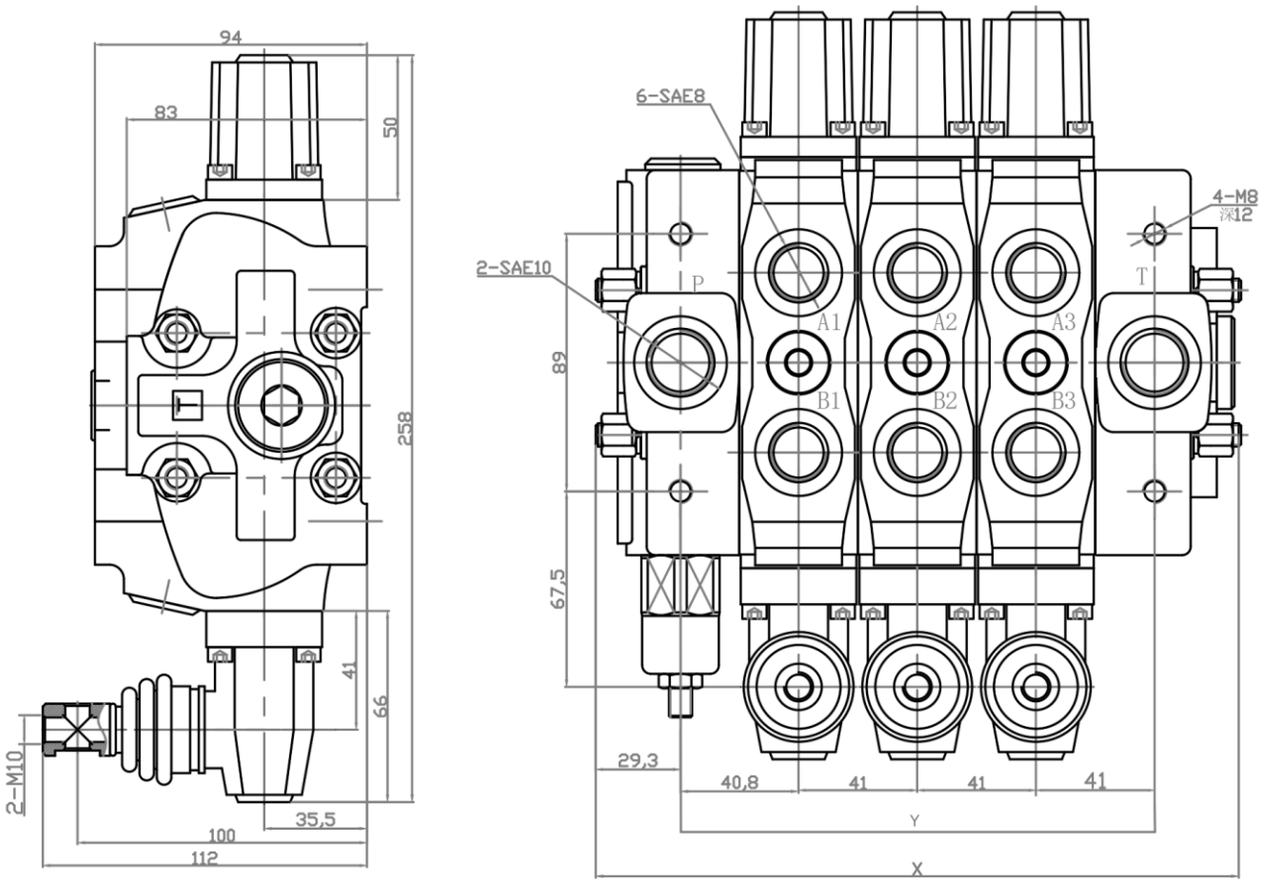
SD8

Sectional Direction Control Valve
Nominal Flow : 80 L/min
Nominal Pressure: 250 Bar



Index

Unit Dimensions (Parallel Circuit) (Dimensions in mm)



Specifications

Nominal Flow Rate		80 L/min
Opening Pressure (Max.)		250 Bar
Back pressure (Max.)	On Outlet port T	25 Bar
Fluid Temperature Range	With NBR Seals	From -20° to 80°C
	With Viton Seals	From -20° to 100°C
Viscosity	Operating Range	From 15 to 75mm²/s
	Min	12mm²/s
	Max.	400mm²/s
Ambient Temperature Range		From -40° to 60°C

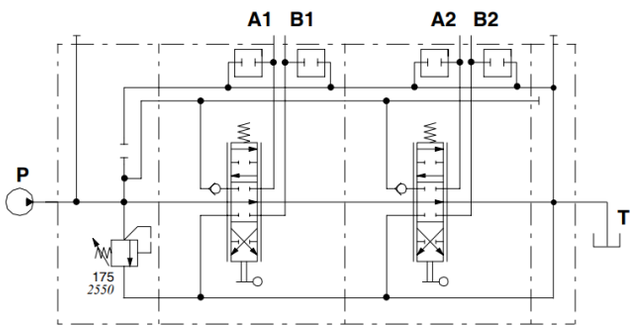
Unit Dimensions (Parallel Circuit) (Dimensions in mm)

Type	X (mm)	Y (mm)	Weight (Kg)
SD8/1	141	82	7.2
SD8/2	182	123	10.5
SD8/3	223	164	13.8
SD8/4	264	205	17.1
SD8/5	305	246	20.1
SD8/6	346	287	23.4

Type	X (mm)	Y (mm)	Weight (Kg)
SD8/7	387	328	26.7
SD8/8	428	369	30
SD8/9	469	410	33.3
SD8/10	510	451	36.6
SD8/11	551	492	39.9
SD8/12	592	533	43.2

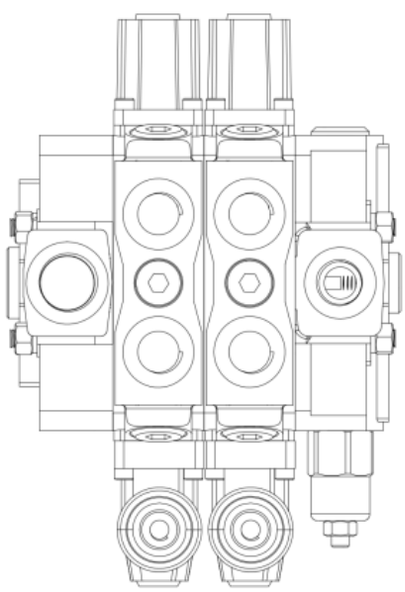
Parallel Circuit

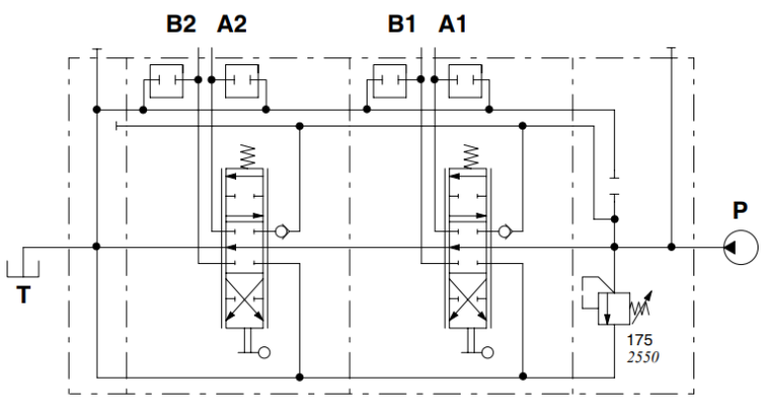
Standard parallel circuit with open center and side inlet and outlet.



SD8/2/L(YG3-175)-18L/18L/RC

Directional Valve with Right Configuration

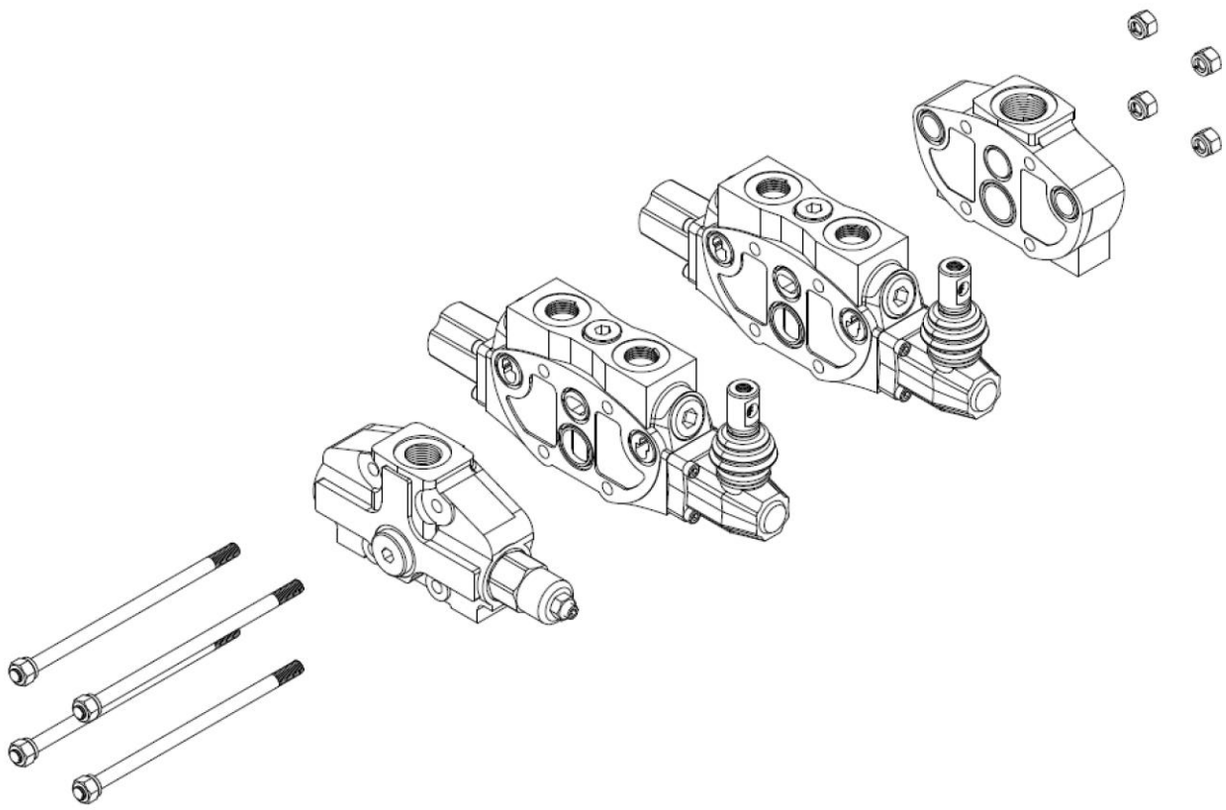




SD8/2/BC(YG3-175)/18L/18L/RC

Ordering Code

SD8 / 2 / AC (YG3-175) / RV /P 1 8 L / 28L(PG2)** / RC / G**
1 2 3 4 5 6 7 8 9 10 11



1. Body Kits

Type	Description	Type	Description
SD8/1	SD8/1 Section	SD8/7	SD8/7 Section
SD8/2	SD8/2 Section	SD8/8	SD8/8 Section
SD8/3	SD8/3 Section	SD8/9	SD8/9 Section
SD8/4	SD8/4 Section	SD8/10	SD8/10 Section
SD8/5	SD8/5 Section	SD8/11	SD8/11 Section
SD8/6	SD8/6 Section	SD8/12	SD8/12 Section

2. Inlet Cover body

DESCRIPTION (Page 07)

For left inlet directional valve, side port.	= AC
For left inlet directional valve, upper port.	= AD
For right inlet directional valve, side port	= BC
For right inlet directional valve, upper port.	= BD

3. Inlet Relief Options

DESCRIPTION (Page 07)

Range 40 to 80 bar / 580 to 1150 psi, standard setting 80 bar / 1150 psi	= YG2
Range 63 to 200 bar / 900 to 2900 psi, standard setting 160 bar / 1750 psi	= YG3
Range 120 to 315 bar / 2300 to 4600 psi, standard setting 200 bar / 3200psi	= YG4
Relief valve blanking plug	= SV

Ordering Code

4. Special Valves Options on Inlet Slice

DESCRIPTION (Page 08)

Rotary commutator for arranged inlet slice.	= RV
Solenoid operated pilot unloading valve-push and button emergency	= EV

5. Working Section Options

DESCRIPTION (Page 08)

Standard working slice without port cartridge.	= Q
Valve blanking plug in port cartridge.	= P
Series Valve blanking plug in port cartridge.	= SP

6. Spool options

DESCRIPTION (Page 09)

Double acting, 3 positions, with A, B closed in neutral position	= 1
Double acting, 3positions, with A and B open to tank in neutral position	= 2
Single acting on A, 3 positions, B plugged; requires G1/2 plug	= 3
Single acting on B, 3 positions, A plugged requires G1/2 plug	= 4
Double acting, 3 positions, with B open to tank in neutral position.	= 1B
Double acting, 3 positions, with A open to tank in neutral position.	= 1A
Double acting, 3 positions, with A, B closed in neutral position, for series circuit.	= 1A
Double acting, 3positions, with A and B open to tank in neutral position,for series circuit.	= 2S
Double acting, 3 positions, regenerative in position 1.	= 8F
Double acting, 4 positions, float in position 3 with spool in.	= 5
Double acting, 4 positions, float in position 3 with spool out.	= 5B

7. “A” Side options

DESCRIPTION (Page 10)

With spring return in neutral position	= 8
With detent in position 1, neutral and 2	= 11
With detent in position 0-1	= 15
With detent in position 0-2	= 16
With spring return position 0-1	= 19
With spring return position 0-2	= 20
With detent in position 1, and spring return in neutral	= 9B
With detent in position 2, and spring return in neutral	= 10B
With detent in position 1+2, and spring return in neutral	= 11B
4 positions with spring return in neutral position and detent in position 3 for 5 or 5B Spools	= 13C
ON-OFF pneumatic control kits	= 8P
Kick out control kits	= 8F
ON-OFF electric and pneumatic control kits with 12VDC 12V	= 8EP3
ON-OFF electric and pneumatic control kits with 24VDC 24V	= 8EP4
Hydraulic control kits	= 8IM
ON-OFF Electronic control with 12VDC 12V	= 8ED1
ON-OFF Electronic control with 24VDC 24V	= 8ED2
8D2 With spring return to neutral position and pin with M8 male thread for dual control	= 8D2
ON-OFF electric hydraulic control kits with 12VDC 12V	=8EH3**
ON-OFF electric hydraulic control kits with 24VDC 24V	= 8EH4**
Micro switch kit on position 1 (spring side)	= 8MG1
Micro switch kit on position 2 (lever side)	= 8MG2**
Micro switch kit on position 1&2	= 8MG3**

****Those are under developing items, there is no detailed information now**.

Ordering Code

8. “B” side options

DESCRIPTION (Page12)

Standard lever box	= L
L180 Standard lever box with rotated 180 °	= L180
SLP Without lever, with dust proof plate	= SLP
LCB Joystick levers for 2 sections	= LCB
TQ Cable connection	= TQ

9. Port Valves Options on A B ports
Anti-Shock Valves

DESCRIPTION (Page 16)

Range 80-140bar (790-2050psi), standard setting 60bar (870psi)	= PG2
PG3 Range 63-220bar (900-3200psi), standard setting 100bar(1450psi)	= PG3
PG4 Range 180-350bar (2600-5100psi), standard setting 200bar(2900psi)	= PG4

Anti-Shock and anti-cavitation valve

DESCRIPTION (Page 16)

Range 63-125bar (900-1800psi), standard setting 63bar (900psi)	= UG2
UG3 Range 100-250bar (1450-13600psi), standard setting 100bar (1450psi)	= UG3
UG4 Range 200-315bar (2900-4600psi), standard setting 200bar (2900psi)	= UG4

10. Outlet Slice options

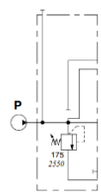
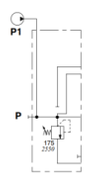
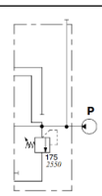
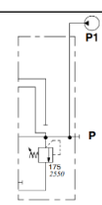
DESCRIPTION (Page17)

With side outlet	= RC
With upper outlet	= RD
With side outlet and upper carry-over plug	= RE
With side outlet and upper closed center.	= RK
With back pressure valve: to be used together with the electro-hydraulic control.	= RV

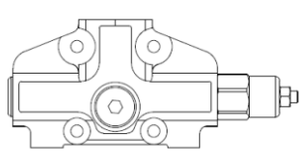
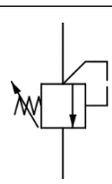
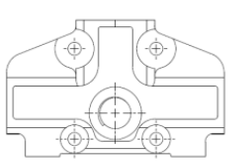
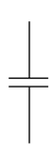
11. Port size options

Port Code	P	T	A	B
M	18*1.5	22*1.5	18*1.5	18*1.5
S	7/8-14UNF-2B (SAE10)	7/8-14UNF-2B (SAE10)	3/4-16UNF-2B (SAE8)	3/4-16UNF-2B (SAE8)
G	G1/2	G3/4	G1/2	G1/2

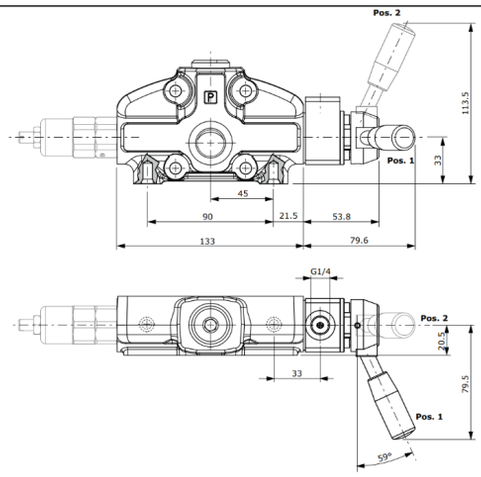
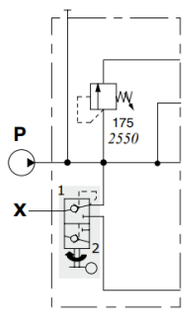
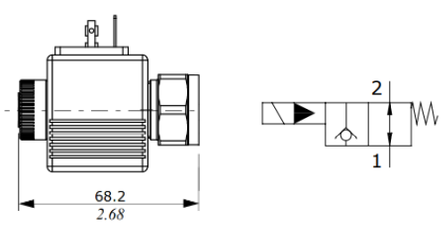
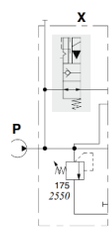
Inlet Cover Body

Type	Description	Symbol
AC	For left inlet directional valve, side port Description example: AC(YG3-175)	
AD	For left inlet directional valve, upper port. Description example AD(YG3-175)	
BC	For right inlet directional valve, side port Description example BC (YG3-175)	
BD	For right inlet directional valve, upper port. Description example BD(YG3-175)	

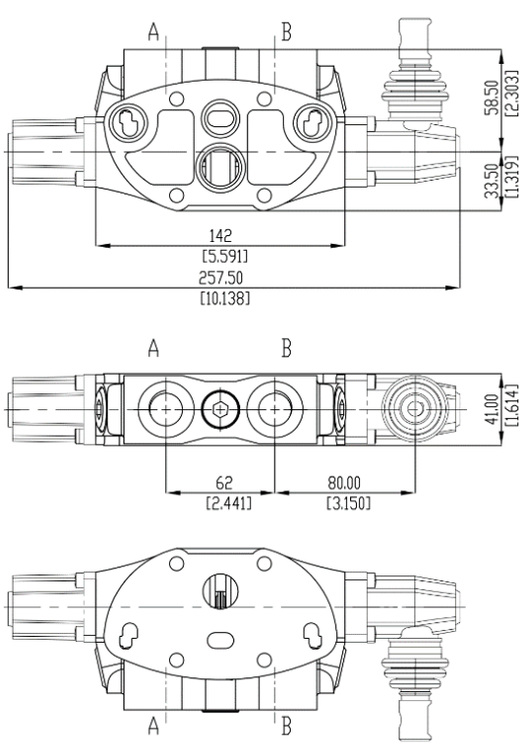
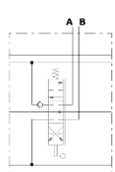
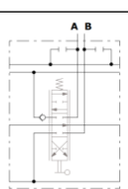
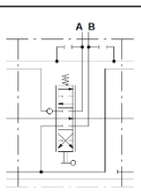
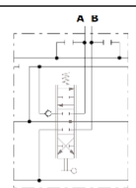
Inlet Relief Options

Type	Drawing	Symbol	Specification
YG			Direct pressure relief valve
SV			Relief valve blanking plug

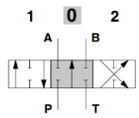
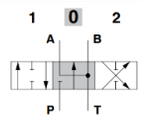
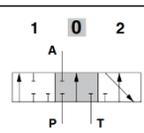
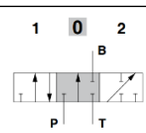
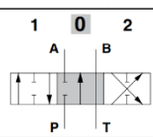
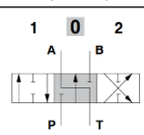
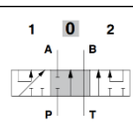
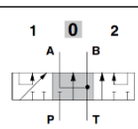
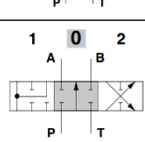
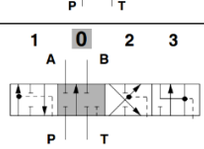
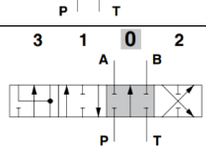
Special Valves Options on Inlet Slice

Type	Specification	Symbol	Symbol
RV	Rotary commutator Max pressure:210bar Internal leakage: 5cm³ /min@100bar		
EV	Solenoid operated unload valve on inlet cover body. Nominal flow:100LPM Max pressure:315bar		

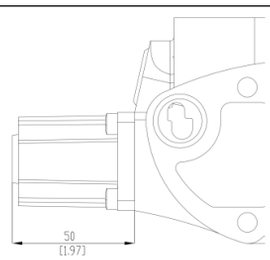
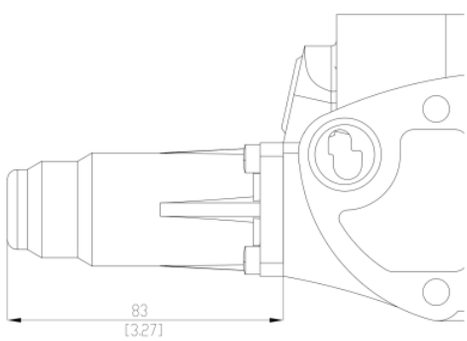
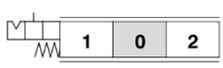
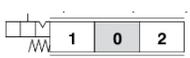
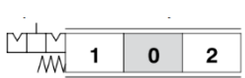
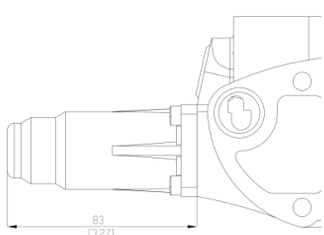
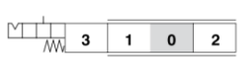
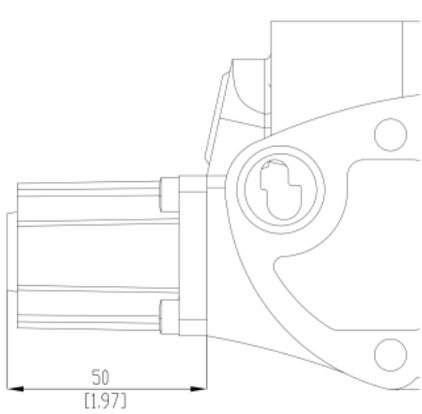
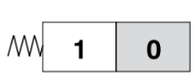
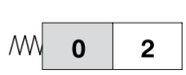
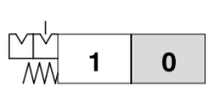
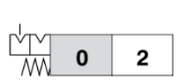
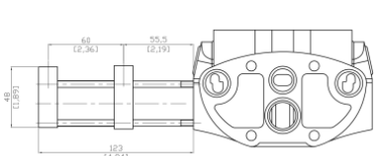
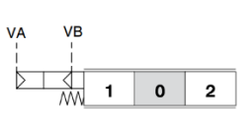
Working Section Options

Type	Specification	Symbol	Symbol
Q	Q type without port valve arrangement		
P	P type with port valve arrangement		
S	S type Series circuit, without port valve arrangement		
SP	SP type Series circuit, with port valve arrangement		

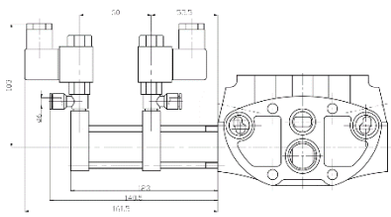
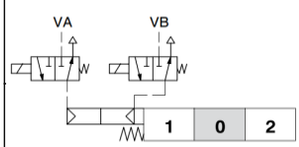
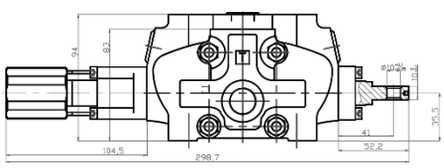
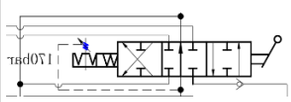
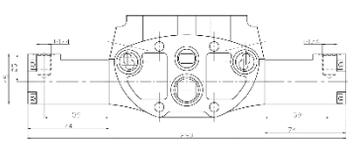
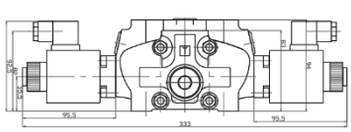
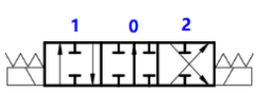
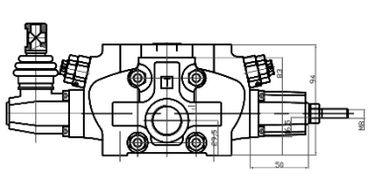
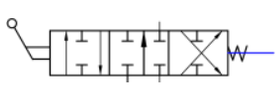
Spool Options

Type	Specification	
1	Double acting, 3 positions, with A, B closed in neutral position	
2	Double acting, 3positions, with A and B open to tank in neutral position	
3	Single acting on A, 3 positions, B plugged; requires G1/2 plug	
4	Single acting on B, 3 positions, A plugged requires G1/2 plug	
1B	Double acting, 3 positions, with B open to tank in neutral position	
1A	Double acting, 3 positions, with A open to tank in neutral position	
1S	Double acting, 3 positions, with A, B closed in neutral position, for series circuit.	
2S	Double acting, 3positions, with A and B connect to tank in neutral position for series circuit.	
8F	Double acting, 3 positions, regenerative in position 1.	
5	Double acting, 4 positions, float in position 3 with spool in.	
5B	Double acting, 4 positions, float in position 3 with spool out.	

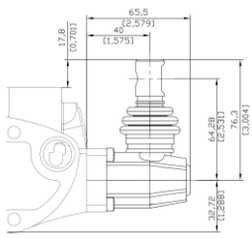
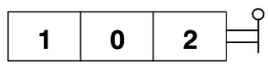
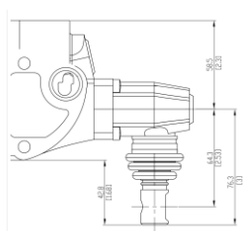
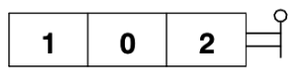
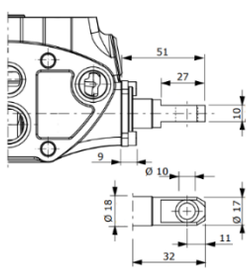
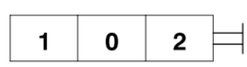
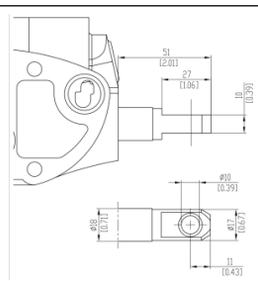
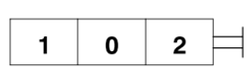
“A” Side Options

Type	Specification	Symbol	
8	With spring return in neutral position		
11	With detent in position 1, neutral and 2		
9B	With detent in position1 and spring return in neutral position		
10B	With detent in position 2 and spring return in neutral position		
11B	With detent in position1,2 and spring return in neutral position		
13C	4 positions with spring return in neutral position and detent in position 3 for 5or 5B Spools		
19	With spring return in neutral position from position 1		
20	With spring return in neutral position from position 2		
15	With detent in position 1 and neutral		
16	With detent in position 2 and neutral		
8P	ON/OFF pneumatic kits		

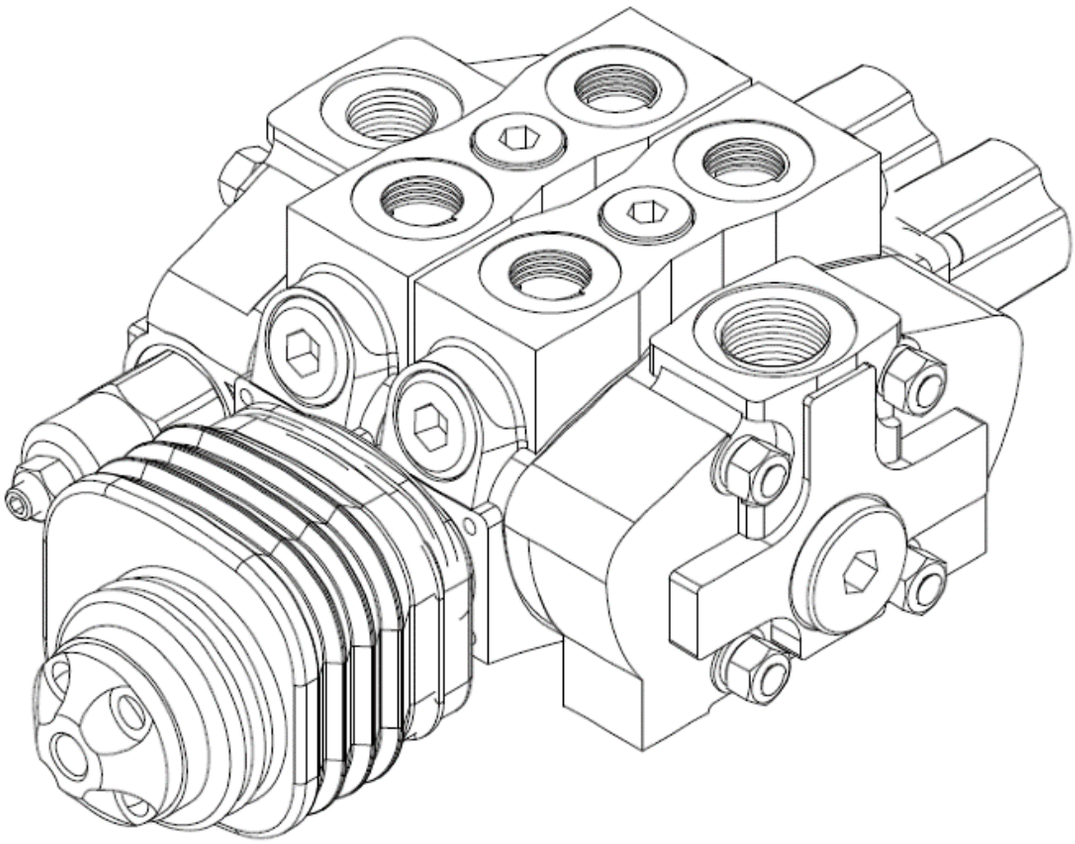
“A” Side Options

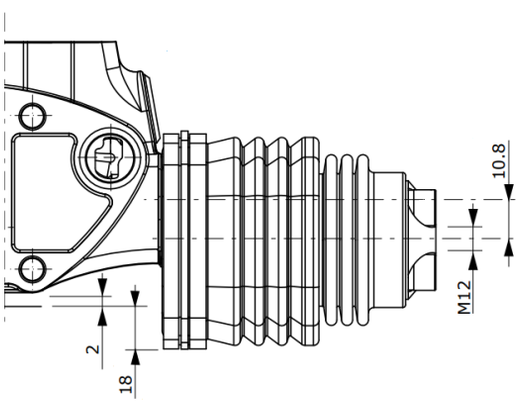
Type	Specification	Symbol	
8EP3	ON/OFF electro-pneumatic kits-12VDC		
8EP4	ON/OFF electro-pneumatic kits- 24VDC		
8F	Kick out control kits		
81M	Hydraulic control kits		
8ED1	ON/OFF electronic control with 12VDC		
8ED2	ON/OFF electronic control with 24VDC		
8D2	With spring return to neutral position and pin with M8 male thread for dual control		

“B” Side Options

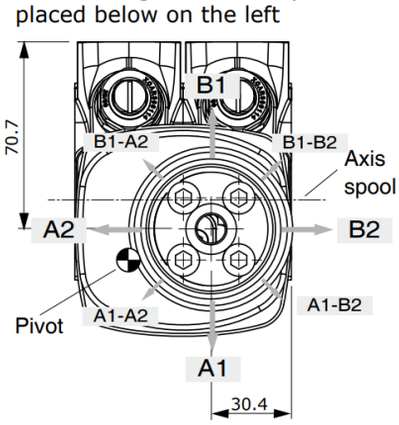
Type	Drawing	Specifications
L		L type standard handle lever 
L180		L180 standard handle lever with 180°opposite 
SLP		SLP type mechanical control with dust proof plate kit. 
SL		SL type mechanical control without handle lever kits. 

Type LCB Joystick

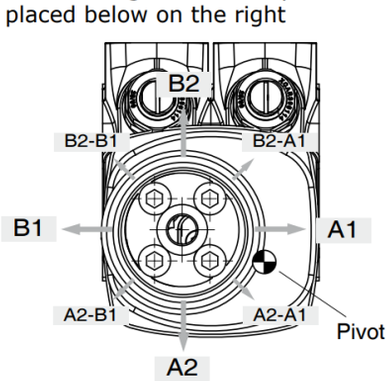


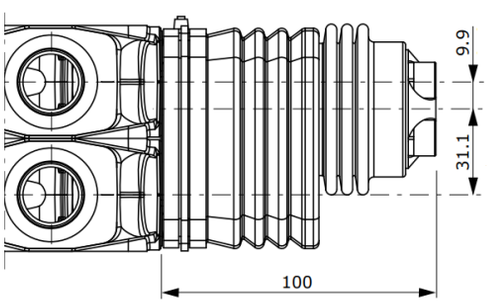


LCB1 configuration with pivot placed below on the left

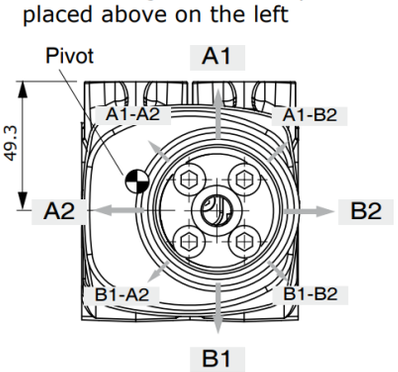


LCB2 configuration with pivot placed below on the right

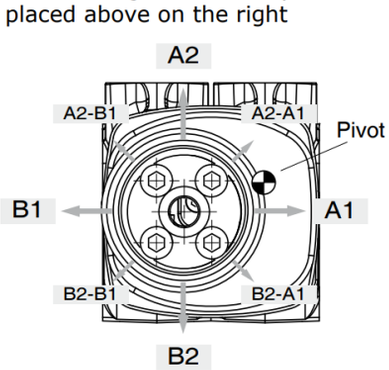




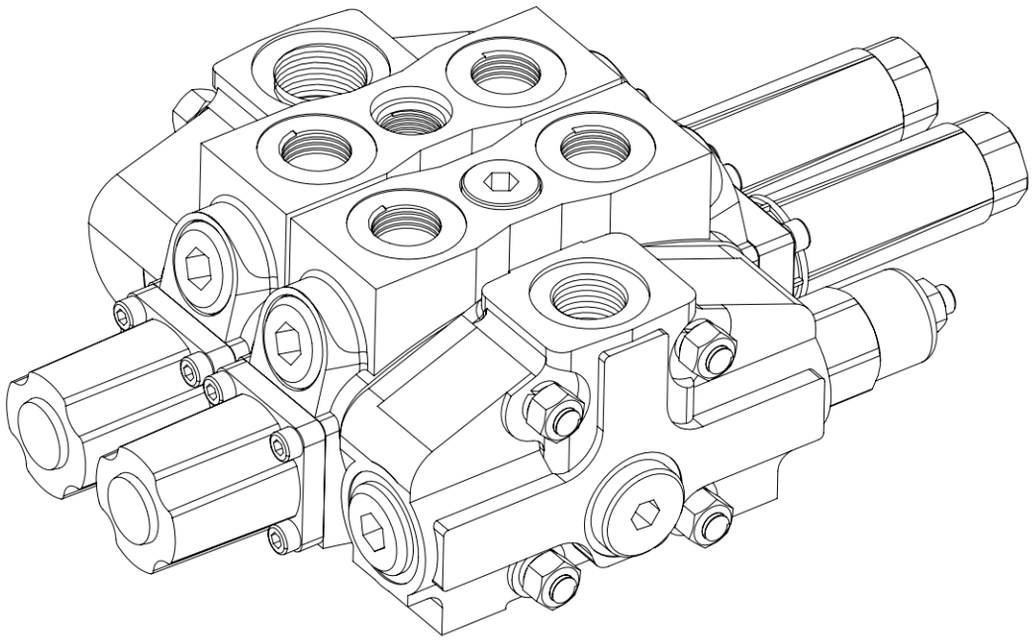
LCB3 configuration with pivot placed above on the left

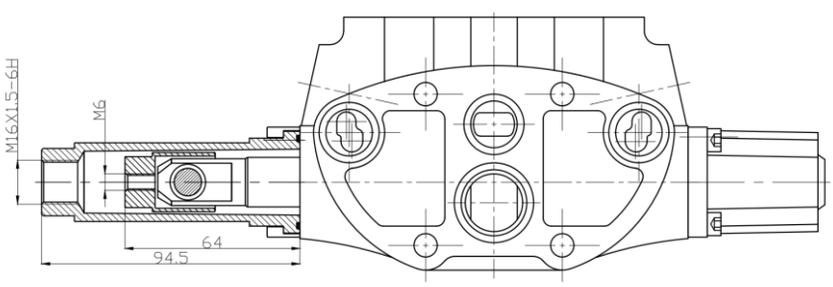


LCB4 configuration with pivot placed above on the right

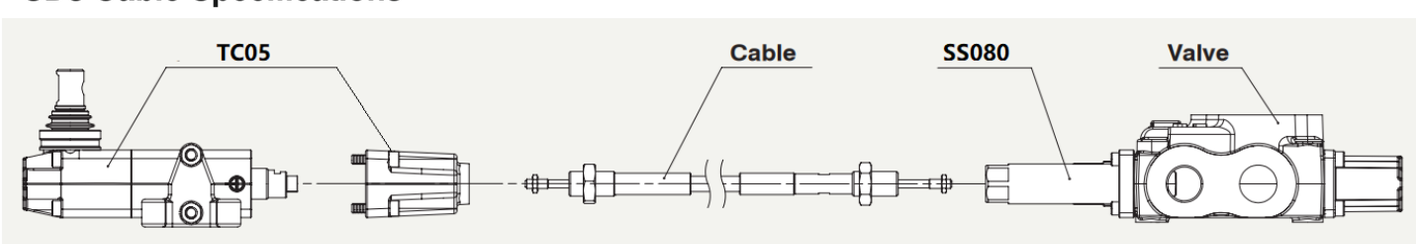


Type TQ Cable Connection



Type	Drawing	Symbol
SS080		

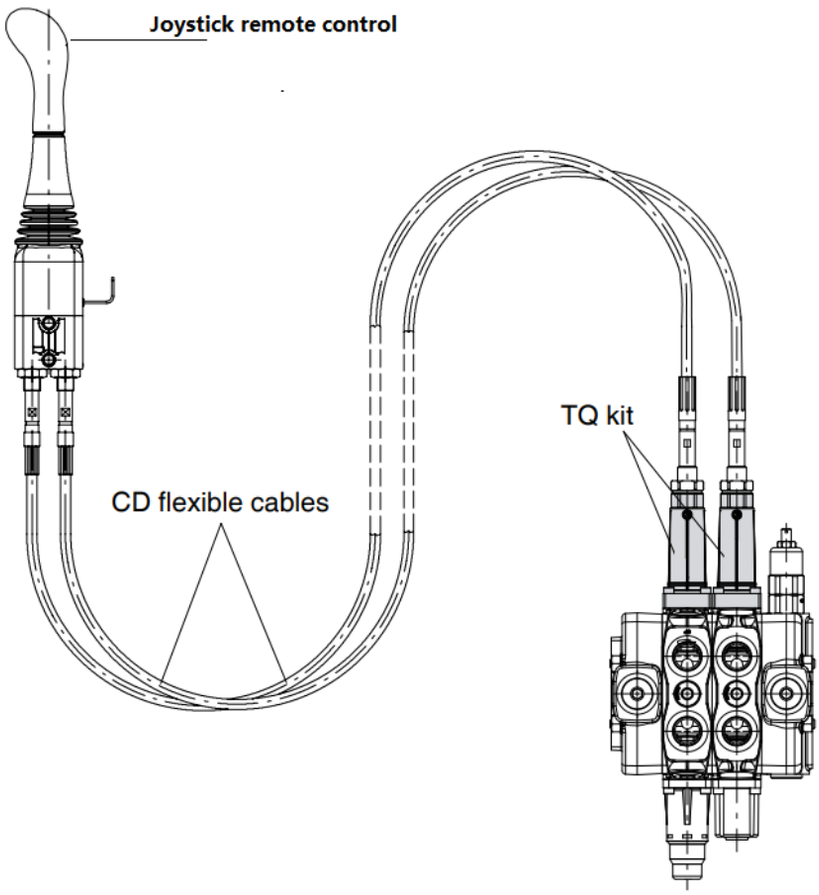
SD8 Cable Specifications



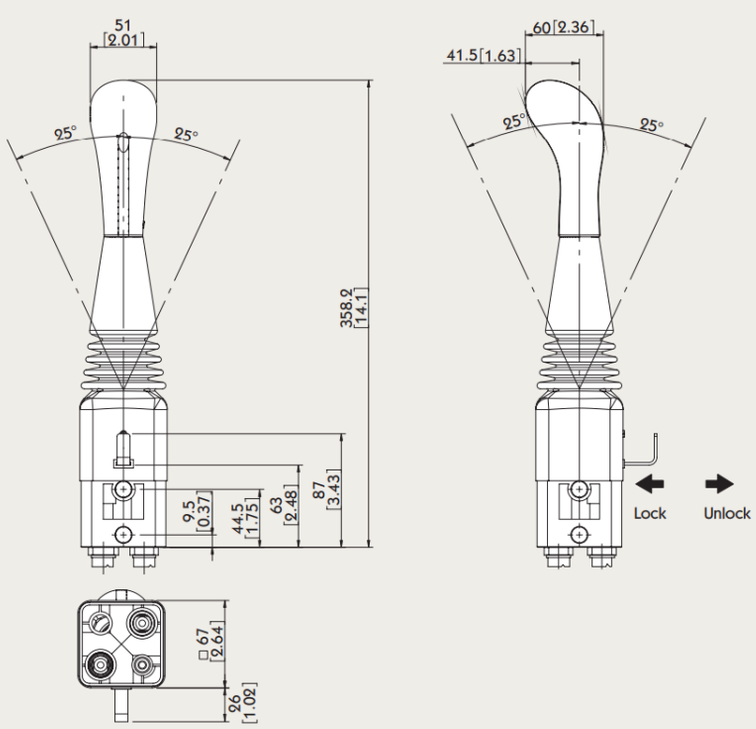
Cable Code: TQ05/3/M3/CD1500/SS080

M: Spring return
N: Without spring
3: 3 spools
CD1500: 1500mm cable 1.5
SS080: SD8 steel cable kits

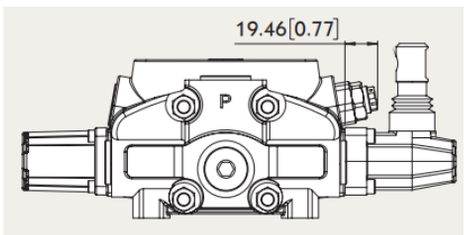
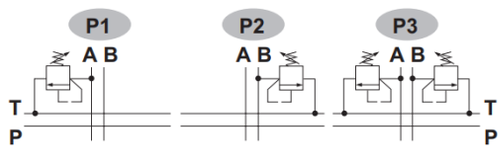
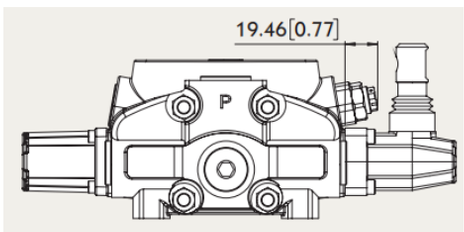
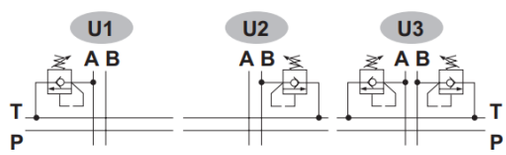
Joystick for cable control



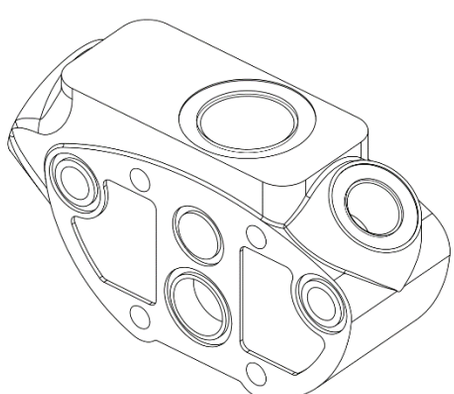
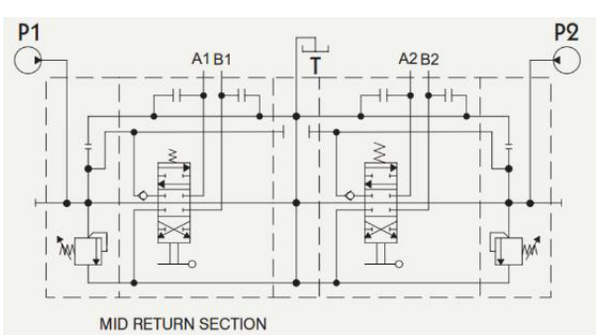
Type FCR-2



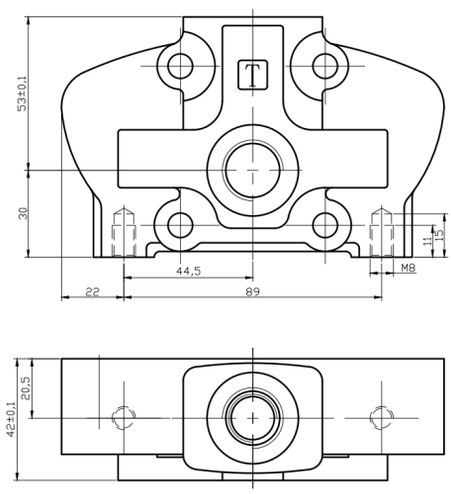
Port Relief Valves on A B ports

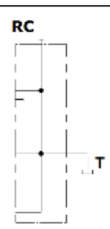
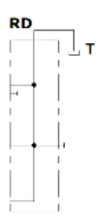
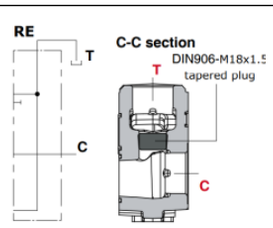
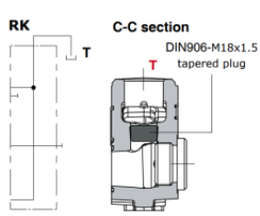
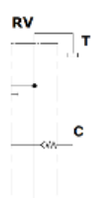
Type	Drawing	Symbol
P		 P1: relief valve on A port. P2: relief valve on B port P3: relief valves on A B ports
U		 U1: relief valve on A port. U2: relief valve on B port U3: relief valves on A B ports

Intermediate Block for Sectional Type SD8

Type	Drawing	Symbol
ECS	 Port Size: G1	

Outlet Cover Options



Type	Specifications	Symbol
RC	With side outlet	
RD	With upper outlet	
RE	With side outlet and upper carry over plug	
RK	With side outlet and upper closed center	
RV	With back pressure valve, to be used together with the electrohydraulic control.	

The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.

THM Huade Hydraulics Pvt Ltd
F-127, Phase-VIII, Focal Point,
Ludhiana-141010, Punjab (INDIA)
PH: 0161-2672777, 0161-2672778
E-mail: sales@thmhuade.com
Website: www.thmhuade.com

Follow us: