

DESCRIPTION

A heavy duty, multifunction, screw-in, cartridge-style, spool-type flow divider/combiner.

OPERATION

In the dividing mode, the INFD50-45 will divert input flow from port ③ to ports ② and ④, based on the ratio specified, regardless of operating pressure.

When the flow direction is reversed the valve will combine flows from ② and ④ to port ③. Synchronizing flow is provided in both the dividing and combining modes at “bottomed” conditions in cylinder applications and at “stalled” conditions in motor applications.

FEATURES

- Hardened parts for long life.
- Quiet, modulated response.
- Wide operating flow range.
- Synchronizing in dividing and combining modes.
- Floating cage — high installation torque.
- Industry common cavity.

RATINGS

Operating Pressure: 345 bar (5000 psi)

Flow Options:

- Input Flow: 15.1 lpm (4 gpm) ; Ratio: 50:50; Model Code: 22
- Input Flow: 22.7 lpm (6 gpm) ; Ratio: 50:50; Model Code: 33
- Input Flow: 34.1 lpm (9 gpm) ; Ratio: 50:50; Model Code: 44
- Input Flow: 45.4 lpm (12 gpm) ; Ratio: 50:50; Model Code: 66

Synchronizing Flow: Approximately 10% of maximum inlet flow

Temperature: -40°C ~ 120°C

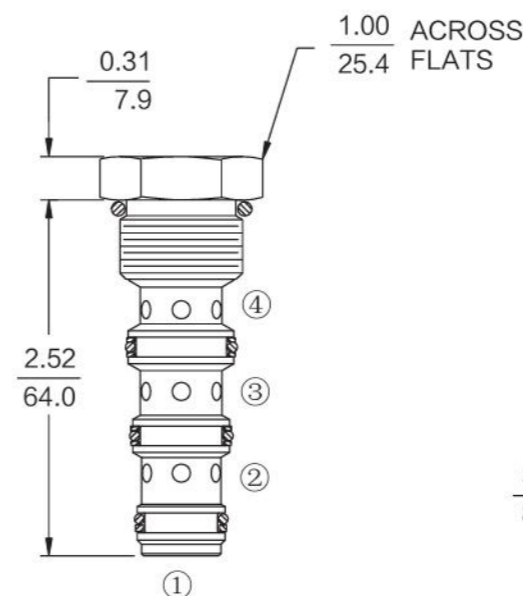
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)

Cavity: T10-4A ; See bottom of this catalog.

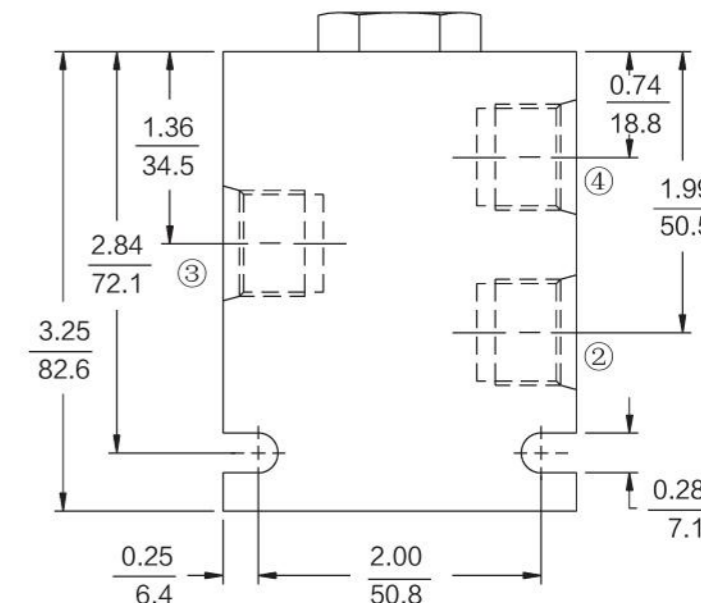
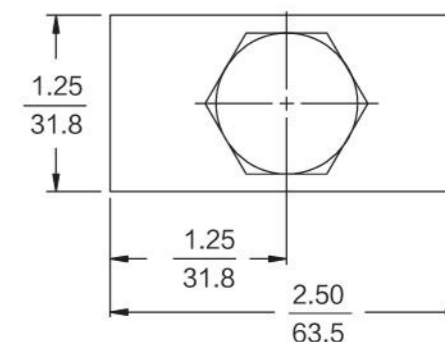
DIMENSIONS

INCH
MILLIMETRE

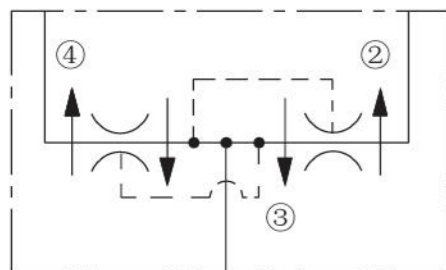
TORQUE:
48-52 ft-lbs (65-71Nm)



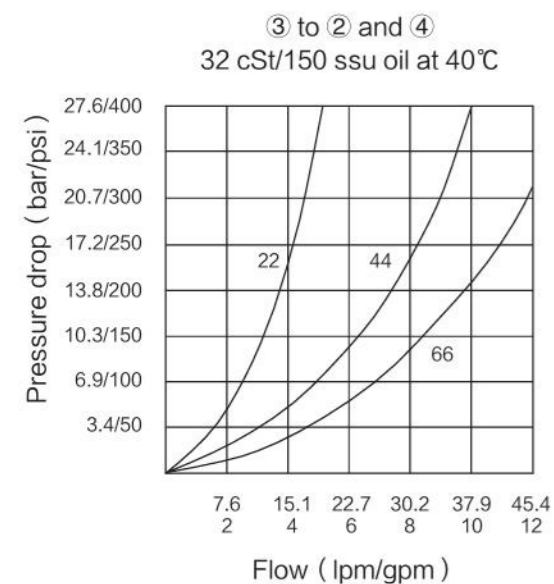
Port 1 is not used.



ISO SYMBOL



PERFORMANCE (Cartridge Only)



MATERIALS

Cartridge: Weight: 0.10kg (0.23 lbs) ;
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.

Standard Ported Body: Weight:
0.34kg (0.75lbs) ;
Anodized highstrength
6061 T6 aluminum alloy,
rated to 240 bar (3500 psi) ;
Required for operation
over 240 bar (3500 psi);
Ductile iron bodies available;
dimensions may differ.

TO ORDER

INFD50-45 - - -

Ported Bodies		Dividing/Combining Ratio	
Cartridge Only	0	22	50:50 (15.1 lpm)
SAE 6 (all ports)	6T		(4 gpm) Input
SAE 8 ③		33	50:50 (22.7 lpm)
SAE 6 ② and ④	8D		(6 gpm) Input
1/4 in. BSP* (all ports)	2B	44	50:50 (34.1 lpm)
3/8 in. BSP* (all ports)	3B		(9 gpm) Input
1/2 in. BSP* ③		66	50:50 (45.4 lpm)
3/8 in. BSP* ② and ④	5B		(12 gpm) Input
Required for operation over 240 bar (3500 psi); FD50 option.			
Seals			
N		Buna N (Std.)	
V		Fluorocarbon	