

# Shockless Type Proportional Electro-Hydraulic Directional and Flow Control Valves

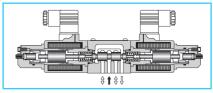
These valves are well accepted by industrial users as shifting time adjustable type shockless valves. By employing the basic design concept of the "G series solenoid operated directional valves", we have been successful developing the shifting time adjustable shockless valves with high performance which makes the speed setting possible at any high speed operation.

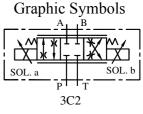
In combination with the newly developed digital amplifiers, the further enhancement of maneuverability and repeatability of the valves can be realized.

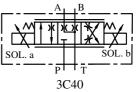
## Specifications

Specifications				
Description	EDFG-01			
Max. Operating Pressure	Kgf/cm <sup>2</sup>	250		
Max. Flow	L/min	30		
Max. Tank Line Back Pressure Kgf/cm <sup>2</sup>		140		
Rated Current	mA	1100		
Coil Resistance	Ω	10.8		
Hysteresis		5% or Less		
Repeatability		1% or Less		
Step Response (Typical Rating) 0 ←→ 100%		100ms or less		
Frequency Response	Phase	20Hz(-90 Degrees)		
	Gain	25 Hz (-3dB)		
Approx. Mass	Kg.	2.4		









# Model Number Designation

F-	EDF	G	-01	-30	-3C2	-XY	-50
Special Seals	Series Number	Type of Mounting	Valve Size	Rated Flow L/min	Spool Type	Direction of Flow	Design Number
F: Special Seals for Phosphate Ester Type Fluid (Omit if not required)	EFB: Shockless Type Proportional Directional and Flow Control Valve	G: Sub-Plate Mounting	01	30	3C2 T T	XY: Metre – In Metre - Out	50

#### Attachment

#### Mounting Bolts

Model Number	Socket Head Cap Screw	Qty.
EDFG-01	M5 x 45 Lg.	4

# Sub-Plate

Model Number	Sub-Plate Model Number	Thread Size	Approx. Mass kg	
EDFG-01	DSGM-01-3180	1/8 BSP.F	0.8	
	DSGM-01X-3180	1/4 BSP.F		

- Sub plates are available. Specify the sub plate model number from the table above. When sub plates are not used, the mounting surface should have a good machined finish.
- Sub plates are those for 1/8 solenoid operated directional valves, see page no. 358

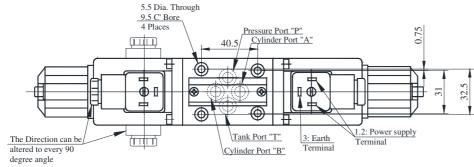
E Series 40Ω-10Ω Series Proportional Electro-Hydraulic Relief and Flow Control Valves



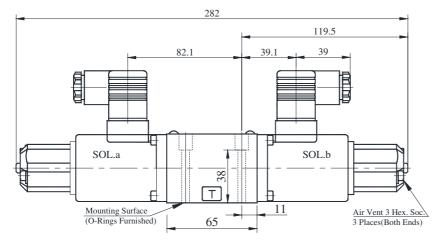
## Applicable Power Amplifiers

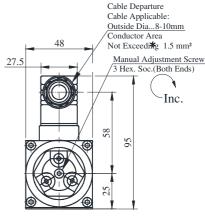
For stable Performance, it is recommended that YUKEN's applicable power amplifiers be used. Model Numbers: AMN-G/W-10

#### EDFG-01-30-3C\* -XY-50



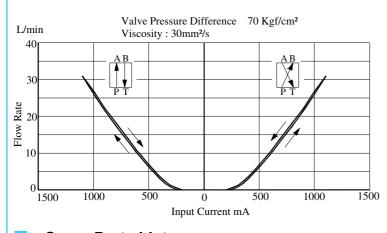
# DIMENSIONS IN MILLIMETRES



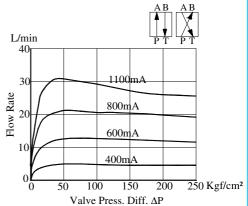


<sup>\*</sup> Under normal conditions, however, this screw must be in its original position

# Input Current vs. Flow



## Valve Pressure Difference vs. Flow



## Spare Parts List

#### List of Seals

Note: When Ordering the seals, please specify the seal kit numbers from the table below.

Item	Name of Parts	Part Numbers	Qty.	Remarks	
1	O-Ring	SO-NB-P9	4		
2	O-Ring	SO-NB-P22	2	Included in Seal Kit	
3	O-Ring	SO-NB-P7	2	Seal Kit	
4	Fastener Seal	SG-FCF-4	6	Kit No:	
5	O-Ring	SO-NB-P18	2	KS-EDFG- 01-50	

# Solenoid Assy.

Valve Model Numbers	Solenoid Assy.	Qty.
EDFG-01-30-X-XY-50	E318-Y05M2-28-61	2

Note: The connector assembly GDM-211-B-11 is not included in the solenoid assembly.