

# SPECIFICATIONS

MODEL		FV-100e	FV-100	FV-300e	FV-300	FV-800e	FV-800			
TEST LOAD	TYPE A	N : 9.807 kgf : 1	19.61 2	29.42 3	49.03 5	98.07 10	196.1 20	294.2 30	490.3 50	
	TYPE B	N : 2.942 kgf : 0.3	4.903 0.5	9.807 1	29.42 3	49.03 5	98.07 10	196.1 20	294.2 30	
LOADING MECHANISM		Automatic Load and Release Method								
LOAD APPLYING SPEED		Initial loading speed : 120 $\mu\text{m}$ / sec Actual loading speed : 60 $\mu\text{m}$ / sec (Automatic speed changing)								
DWELL TIME		5 ~ 40 sec			5 ~ 99 sec					
TURRET MECHANISM		Manual	Automatic	Manual	Automatic	Manual	Automatic	Manual	Automatic	
DIAMOND INDENTER	Standard	Vickers Indenter (HV)								
	Option	—						Knoop Indenter (HK) / Two Indenters (HV + HK) are available on the special Dual Indenter Turret simultaneously		
OBJECT LENS	Standard	Type A : X10 / Type B : X10 & X 20								
	Option	Max. 3 Lenses					Max. 4 Lenses			
EYEPIECE		X 10								
MEASURING MICROSCOPE	Type	Mechanical			Electronic					
	Max. Measurement length	800 $\mu\text{m}$ (In case of X 100) / 400 $\mu\text{m}$ (In case of X 200)								
	Min. Graduation	Micrometer : 0.5 $\mu\text{m}$			Digital : 0.1 $\mu\text{m}$ (In case of X 100 & X 200) / 0.01 $\mu\text{m}$ (In case of over X 400)					
	Min. Measurement unit	Eye judgment : 0.1 $\mu\text{m}$			Digital : 0.1 $\mu\text{m}$ (In case of X 100 & X 200) / 0.01 $\mu\text{m}$ (In case of over X 400)					
MAX. HEIGHT OF SPECIMEN		210 mm								
MAX. DEPTH OF SPECIMEN		165 mm								
AVAILABLE TEST PARAMETER		HV / HK					HV / HK / HBS / HBW / Kc			
BRINELL HARDNESS TEST		—					HBS & HBW available Option : Ball indenter & Light load			
FRACTURE TOUGHNESS TEST (K <sub>IC</sub> )		—					Conform to JIS R1607 / IF Method			
HARDNESS CONVERSION		—					Conform to SAE (J-417b) & ASTM (E-140)			
DATA MEMORY		—					Max. 999 Data			
OPERATION PANEL (SHEET SW for Type 100 / 300 & TOUCH PANEL SW for Type 800)		START / LIGHT UP-DOWN / TURRET ROTATION (for Auto-Turret Type)			START / RESET / DWELL TIME / LIGHT UP-DOWN / TURRET ROTATION (for Auto-Turret Type)			START / RESET / DWELL TIME / LIGHT UP-DOWN / TEST LOAD / CONVERSION SCALE / TURRET ROTATION (for Auto-Turret Type) / CLEAR		
DATA DISPLAY (LED for Type 100 / 300 & LCD for Type 800)		POWER / LOADING (Pilot Lamp)			D1 / D2 / HV-HK / HARDNESS VALUE / LOADING / OK-NG CRITERIA			D1 / D2 / HV-HK / HARDNESS VALUE / CONVERSION DATA / OK-NG CRITERIA / START (Blinking for Loading) / TEST TIMES / etc.		
DATA OUTPUT & PRINT OUT		—			RS232C (HV-HK / HARDNESS VALUE / OK-NG) CENTRONICS (D1 / D2 / HV-HK / HARDNESS VALUE / TEST LOAD / OK-NG)			RS232C / CENTRONICS (D1 / D2 / HV-HK / HARDNESS VALUE / TEST LOAD / OK-NG / CONVERSION SCALE / CONVERSION DATA / STATISTIC DATA / etc.)		
OK / NG CRITERIA		—			Limit setting and HI / OK / LO Display					
SELF DIAGNOSIS		—					Display troubles with motors and switches			
LIGHT SOURCE		6V / 18W (Auto-iris mechanism)								
OPTICAL FUNCTION		Aperture diaphragm / Field aperture / Color filter : Replaceable								
ACCURACY		Conform to JIS B-7725, ASTM E-92 and ISO 6507-2								
PHOTOGRAPHIC DEVICE		Capable to mount at anytime on top of the machine (Camera / Attachment : Option)								
DIMENSIONS		(W) 215 x (D) 517 x (H) 690 mm								
WEIGHT		Approx. 55 kg (Including Standard Accessories)								
POWER SUPPLY		Japan : Single phase AC 100V 50 / 60Hz Overseas : Single phase AC 100 ~ 240V 50 / 60Hz (Should be specified before shipment)								