SCHMIDT
control instruments

Textile Hardness Tester

HP Series

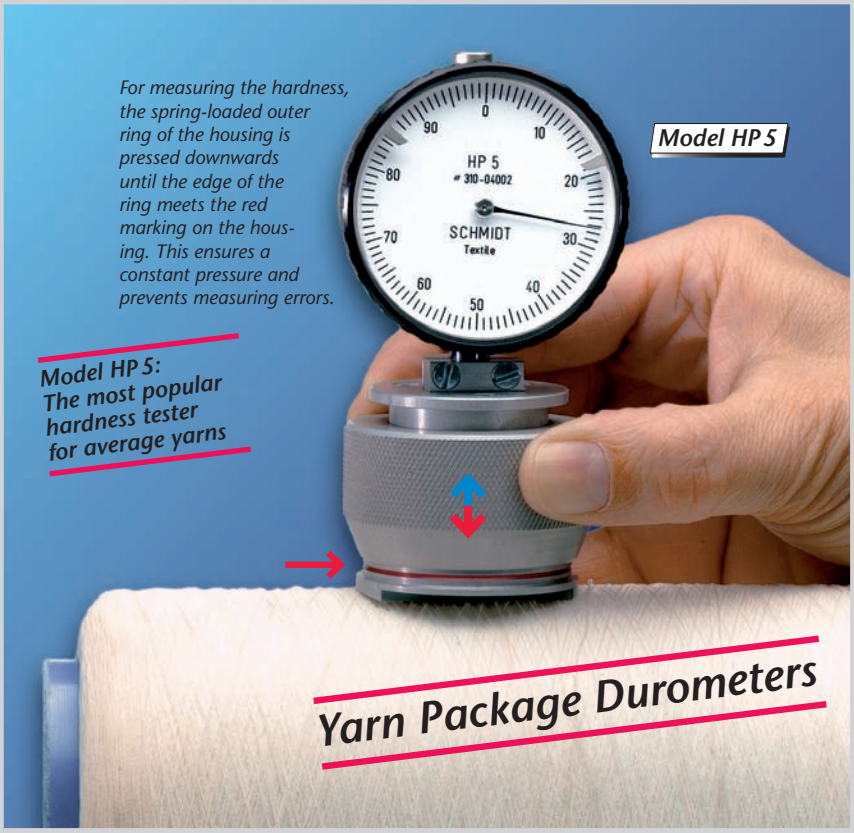
With constant measuring pressure

To measure the winding density (hardness) of textile bobbins, beams, spools, cones, dye packages etc.

Special features:

- 6 different models with different ball sizes and working faces are available
- Constant pressure system eliminates false reading due to difference between operators
- Ball shaped indentor prevents damage to bobbins
- Working face slightly curved to fit on small bobbins
- Special flat bottom versions for bobbins with diameters over 400 mm, such as warp beams
- Also available with optional accessory memory pointer (Code M)

The principle used to measure textile hardness is based on measuring the resistance force of the penetration of a ball against the spool under a known spring load. The measuring principle is the same as for the Shore A hardness test.



Specifications	Model HP2.5	Model HP5	Model HP10	Model HP2.5-F	Model HP5-F	Model HP10-F
Indentor:	Ball 2.5 mm Ø	Ball 5 mm Ø	Ball 10 mm Ø	Ball 2.5 mm Ø	Ball 5 mm Ø	Ball 10 mm Ø
Area applications:	for closely wound bobbins of synthetic, finished fibers and filaments	for loosely wound bobbins of synthetic fibers and closely wound natural fibers, yarns and threads	for very loosely wound bobbins of thick yarns, such as carpet yarns	with flat working face for measuring warp beams. Same as Model HP 2.5, but for bobbin diameters over 400 mm	Same as Model HP 5, but for bobbin diameters over 400 mm	Same as Model HP 10, but for bobbin diameters over 400 mm
Depth of indentation*:	0 - 2.5 mm	0 - 2.5 mm	0 - 2.5 mm	0 - 2.5 mm	0 - 2.5 mm	0 - 2.5 mm
Test pressure**:	approx. 12.5 N	approx. 12.5 N	approx. 12.5 N	approx. 12.5 N	approx. 12.5 N	approx. 12.5 N
Measuring spring force*:	0.55 - 8.065 N	0.55 - 8.065 N	0.55 - 8.065 N	0.55 - 8.065 N	0.55 - 8.065 N	0.55 - 8.065 N
Display range:	0 - 100 hardness graduation marks			0 - 100 hardness graduation marks		
Scale diameter:	51 mm	51 mm	51 mm	51 mm	51 mm	51 mm
Working face radius:	55 mm	55 mm	55 mm			
Working face flat:				45 mm Ø	45 mm Ø	45 mm Ø
Weight, net (gross):	approx. 300 g (500 g)			approx. 300 g (500 g)		
Dimensions:	50 x 60 x 110 mm (L x W x H)			50 x 60 x 110 mm (L x W x H)		

** Meets requirements of Shore A ** Spring load of outer ring to create constant pressure when outer ring is pulled down to red marking*

Subject to change without notice.