



40-602-... – Penetrometer for pipes RP

Standards

ASTM G17, DIN 30 670, DIN 30 671, DIN 30 672, DIN 30 674, DIN 30 678, EN 10 285, EN 10 286, EN 10 287, EN 10 288, EN 10 329, ISO 21809



RP3



RP6

Product examples - technical changes reserved

Application

Penetrometer to measure the indentation hardness of polymeric coated pipes and formed parts under influence of weight and temperature.

Features

The pipe penetrometers are manually run testing devices. Tempering and testing is done by digital control units. If required, control, data acquisition and evaluation can be carried out with optionally available software. Depending on the requirements there are different device alternatives from 3 to 6 measuring stations. For testing at room temperature a cooling water connection is integrated by default *. As needed, an external cooling unit can be attached. All components getting in contact with fluids are made from stainless steel or corrosion-resistant materials.

* Except for the RP3A. This device consists only of the measuring head with 3 measuring points, without any temperature control.

Technical Data

Model	RP3	RP3T	RP3K	RP3K PC	RP3A	RP6	RP6T
Article No.	40-602-001	40-602-002	40-602-006	40-602-008	40-602-007	40-602-004	40-602-005
Number of testing stations	3	3	3	3	3	6	6
Temperature Range [°C]	+30...+90	+30...+130	-10...+95	-10...+95	RT	+30...+90	+30...+130
Temperature range [°C] with water cooling (RT = Room temperature)	RT...+90	RT...+130	Cooling integrated	Cooling integrated	-	RT...90	RT...+130
Temperature range [°C] with additional water circulation cooler	+10...+90	+10...+130	Cooling integrated	Cooling integrated	-	+10...+90	+10...+130
Temp. accuracy [°C]	± 1	± 0.5	± 0.2	± 0.2	-	± 1	± 0.5
Display accuracy	0.01 mm	0.01 mm	0.01 mm	0.01 mm	0,01 mm	0.01 mm	0.01 mm
Heating medium	Water	Water/Oil	Water	Water	Ambient temperature	Water	Water/Oil



Dimensions and Connection

Model	RP3	RP3T	RP3K	RP3K PC	RP3A	RP6	RP6T
Dimensions (WxDxH) [mm]	578 x 436 x 238	580 x 350 x 420	750 x 360 x 400	750 x 360 x 400	250 x 150 x 250	818 x 516 x 238	850 x 350 x 420
Weight [kg]	15	30	55	55	7	22	39
Bath volume [l]	14	20	26	26	-	29	40
Bath size (WxDxH) [mm]	350 x 290 x 140	480 x 300 x 160	350 x 300 x 200	350 x 300 x 200	-	590 x 350 x 140	750 x 300 x 200
Power [W]	1800	2300	2500	2500	without	2400	2300
Mains	230 / 115 V 50 / 60 Hz	230 / 115 V 50 / 60 Hz	230 / 115 V 50 / 60 Hz	230 / 115 V 50 / 60 Hz	without	230 / 115 V 50 / 60 Hz	230 / 115 V 50 / 60 Hz
Cooling coil	included	included	not necessary, with built-in cooling unit	not necessary, with built-in cooling unit	without	included	included
PC Extension Kit available	no	yes	no	yes	no	no	yes

Accessories

incl.	Articlenumber	Description
-	40-051	Flat tip indenter 2.5 mm ² , Ø 1.8 mm diameter (DIN 30 670 / ISO 21 809)*
-	40-063	Flat tip indenter 6.35 mm diameter (ASTM G 17)*
-	40-057	Weight DIN 30 670 (2250 g) + basic weight = 2500 g */**
-	40-064	Weight ASTM G 17 (4203 g) + basic weight = 4453 g */**
-	40-067	Weight ISO 21 809 (2298 g) + basic weight = 25 N */**
-	60-005-010	Circulation chiller for penetrometer for pipes

* The number of indenters and weights depends on the number of testing stations, e.g. for 3 testing stations there must be ordered 3 indenters and 3 weights.

** The mass of the loading mechanism (= basic weight 250 g) was taken into account in the design of the various weights so that the respective total load (basic weight + weight DIN / ASTM / ISO) meets the requirements of the selected standard.