



**ACS.REGT1
SAFETY ASSESSMENT CRITERIA
INITIAL & RE-ASSESSMENT
EMERGENCY SERVICE PROVIDER AND
GAS METER INSTALLER
TESTING/COMMISSIONING DOMESTIC
MEDIUM PRESSURE REGULATORS
NATURAL GAS**

REGT1 INITIAL & RE-ASSESSMENT**Introduction**

Tests gas safety competence to install and commission domestic meter regulators.

CBs may adopt Competence and Criteria numbering different to that used in this document.

CB documentation may adopt wording for criteria different to that used in this document, provided the meaning is unaffected.

Range

All types of domestic MP meter regulator.

Pre-requisites**Initial**

CCN1 , CMA1 , CMA3 or CMA2LS + MET1 or MET2 or MET3 LS.

Re-assessment

REGT1.

Exclusions

Regulators where MOP > 2 bar.

References

- HSL56
- IGE/UP/1B
- BS 6400-2
- GIUSP.

ACS.SMB.003.ACDND indicates those Normative Documents that should be held by ACs.

Abbreviations

AC. Assessment Centre
ECV. Emergency control valve
I. Initial
LDF. Leak detection fluid
LP. Low pressure
MIEFV. Meter inlet excess flow valve
MIV. Meter inlet valve
MOP. Maximum operating pressure
MP. Medium pressure
R. Re-assessment
Ref. Reference
SSV. Slam-shut valve.

PERFORMANCE CRITERIA	REF	I	R
1. check control, safety devices and inlet assembly have been strength tested at 3 bar and incorporated as a factory made assembly		✓	✓
2. check certificate confirming date and results of strength test is attached to regulator		✓	✓
2a. check outlet connection from regulator assembly to MIV and meter inlet is correct		✓	✓
3. identify type of regulator to be tested i.e. Type A with MIEFV or Type B with SSV		✓	✓
4. PRS 29/E Purging and testing (P/T) pressure control and safety system utilising: A. a pressure relief valve and MIEFV B. PRS 28/E SSV			
(i) carry out a let-by test of ECV		✓	✓
(ii)		✓	✓
(iii) leave MIV in open position and gas meter not connected to meter bar		✓	✓
(iv) connect test apparatus to meter inlet connection on meter bar with valve to purge hose in closed position		✓	✓
(v) position flame trap on purge hose in a suitable safe location		✓	✓
(v)a apply a 1 minute let by test to ECV (See PC 5)		✓	✓
(vi) open ECV slowly and arm regulator by moving re-set lever against spring pressure for 5 seconds to pressurise test apparatus and release (A.PRS29/E)		✓	✓
(vii) carry out a let-by test on regulator (IGE/UP/1B) (see additional PC 6)		✓	✓
(vii)a open ECV slowly and verify opening of regulator by observing gauge reading (B PRS28/E)		✓	✓
(viii) purge installation by slowly opening purge valve (ensuring MIEFV is not activated on (A.PRS29/E types))		✓	✓
(ix) check regulator outlet pressure. Ensure range of 22 mbar \pm 2 mbar during purge		✓	✓
(x) on completion of purge, close purge valve and apply LDF to all joints not included in original service test (including ECV and MIV)		✓	✓
(xi) rectify any leaks and remove remaining LDF from joints		✓	✓
(xii) check lock-up pressure of regulator. Ensure it does not exceed 27.5 mbar		✓	✓
(xiii) close MIV and release pressure from its outlet by opening purge valve until pressure drops to approx. 10 mbar. Close purge valve		✓	✓
(xiv) apply 1 minute let-by test to MIV. If passing gas, depressurise system and replace and re-test complete regulator assembly.		✓	✓
(xv) test relief valve with MIV open; regulator in its locked-up position and tip of relief vent pipe inserted in water, to confirm no gas is passing		✓	✓
(xvi) test operation of relief valve using pump on test apparatus to increase outlet pressure of regulator until it operates (35 mbar \pm 3.5 mbar)		✓	✓
(xvii) replace regulator and re-test installation, if relief valve operates outside of range		✓	✓
(xviii) (A)test operation of MIEFV by fully opening purge valve until gas ceases to flow		✓	✓
(xix) (A)close purge valve and re-arm second stage of regulator by moving re-set lever against spring pressure for 5 seconds.		✓	✓
(xx) (A)release re-set lever to re-pressurise test apparatus		✓	✓
(xxi) (A)check regulator to ensure it has returned to locked-up position with gauge indicating a pressure not exceeding 27.5 mbar		✓	✓
(xxii) (A)if MIEFV fails to operate, replace regulator and re-test installation		✓	✓
(xxiii) (B)plug off vent outlet and slowly increase pressure using hand pump on test apparatus until SSV operates within pressure range 47.5 mbar \pm 2.5 mbar		✓	✓
(xxiv) (B)de-pressurise installation and re-set SSV. Repeat test in (xxiii) twice; recording operating pressure of SSV		✓	✓
(xxv) (B)replace complete regulator assembly if it operates outside range given (47.5 mbar \pm 2.5 mbar) (Ref C.2 I)		✓	✓
(xxvi) (B)re-set SSV, remove plug from relief vent and re-connect vent pipe		✓	✓
(xxvii)(B)close MIV, depressurise and remove test apparatus		✓	✓
(xxviii)complete relevant parts of meter label and prepare installation to complete installation of gas meter, P/T to IGE/UP/1B		✓	✓
5. let-by test on ECV:			
(i) turn off gas supply at ECV		✓	✓
(ii) connect gauge to suitable point on system		✓	✓
(iii) release any pressure from system from suitable point in installation, and re-seal		✓	✓
(iv) hold open any release mechanism on regulator, to balance pressure		✓	✓
(v) observe gauge for 1 minute; no perceptible movement is allowed (more than 0.5 mbar water gauge)		✓	✓
(vi) if valve is letting-by, suspend test, make installation safe and notify National Gas Emergency Service Call Centre		✓	✓
6. let-by test on gas regulator:			
(i) return release mechanism on regulator to its off position		✓	✓
(ii) re-open ECV		✓	✓

(iii)	observe gauge for 1 minute; no perceptible movement is allowed (> 0.5 mbar water gauge)		√	√
(iv)	if regulator is letting-by, suspend test, make installation safe and notify National Gas Emergency Service Call Centre		√	√
(v)	after successful completion of let-by tests, turn off gas supply and release pressure from system		√	√
KNOWLEDGE AND UNDERSTANDING		REF	I	R
1.	additional types of MP regulators used on MP installations, where tests are required		√	√
2.	regulator lock up pressure on MP regulator where an additional LP regulator is installed (37 mbar)		√	√
3.	pressure at which relief valve will operate on MP regulator when an additional LP regulator is installed (45 mbar ± 3.5 mbar)		√	√
4.	pressure at which SSV will operate when an additional LP regulator is installed (70 mbar ± 5 mbar)		√	√
5.	types of meter housing suitable for MP meter installations		√	√
6.	minimum distance of relief valve vent tip from openings into property		√	√
7.	sealing MP and LP meter regulators		√	√
8.				
9.				
10.	terms and acronyms		√	√