



SPY SERIES - VISUAL DIAGNOSIS MANIFOLD

The new STANDARD!



Why?



The information provided to date by the existing manifold on the market is based on pressures and temperatures. Important but incomplete information, since the standard sightglass does not allow us or only partially, to guess the passage of the refrigerant, its phase (liquid or vapour) and its quality.

How many times, after having a problem on a unit, have we questioned?

... what if I could have observed the presence of water or moisture before?

... what if I could have observed the state of the oil and its mixture with the refrigerant?

... what if I could have seen the presence of contaminants in the refrigerant?

The standard sightglass, incorporated in traditional manifolds, does not help us to obtain useful indications in this sense, and consequently do not help us in making a more complete diagnosis about the "health" of the system.



standard sightglass



How can SPY help us?

The ever-increasing importance of indications on the state of refrigerant and oils has led to design the new SPY WIGAM manifolds.

The innovative SPY diagnostic manifolds, in order to help technicians in daily working, are equipped with a fully transparent central body representing the new frontier of these service equipment.

Here are some of the indications that can be obtained quickly and easily using SPY:

- Clearly show if we are working with refrigerant in the liquid or steam phase.
- Clearly show the presence of contaminants in the refrigerant.
- Show the miscibility state of the refrigerant with oil.



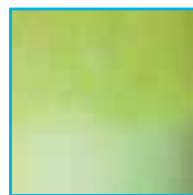
Cleaned refrigerant



Oil and refrigerant with good miscibility



Oil, additives and refrigerant with good miscibility



Bad refrigerant oil miscibility



Refrigerant and additive contaminated by water



Compressor burned

- Combine visual diagnosis with chemical analysis by taking oil samples.

SPY is now available also in the 4-ways version See pag. 62



Look at SPY VIDEO!



TRUST YOUR EYES!



PISTON MANIFOLD



DIAPHRAGM MANIFOLD



"PULSE FREE" GAUGES



OIL FILLED GAUGES



DRY GAUGES



Read the WIGAM model

DIAPHRAGM	PISTON	GAUGE	REFRIGERANT	CONNECTIONS	PRECISION CLASS
W1L - 1 way LP	PF2 - 2 ways	PF80 - PULSE FREE	A4 - R410A-R32	4 - 1/4"SAE	K1 - Class 1
W1H - 1 way HP	PW4 - 4 ways	MS80 - Dry	A6 - R22-R134a-R404A-R407C	5 - 5/16"SAE	
F2 - 2 ways		ML80 - Liquid	A2 - R507-R404A-R134a-R407liq	6 - 3/8"SAE	
W4 - 4 ways		BL60 - Blondelle liquid	A3 - R600a		
W5 - 5 ways			D6 - R600a-R290-R1270		
			D5 - R744		
			D9 - R448A-R449A-R452A-R513A		
			E1 - R404A-R448A-R449A-R134a-R452A		



Piston manifold 4-ways "pulse free", liquid diam gauges. 80, for R410a/R32, connections 5/16"SAE, class 1

SPY 4-WAYS PISTON KIT



REFRIGERANTS DIALS

A4

R410A-R32

A6

R22-R134a-R404A-R407C



K-SPY4PFA6-4-GYSS60-LV

K-SPY4PFA4-5-GYSS60-LV

4 ways manifold kit SPY series with hoses

Sturdy plastic suitcase containing:

- 1 manifold SPY 4 ways with gauges Ø80mm "Pulse free", Class 1.
- 2 flexible hoses, GY series 1500mm, red and blue.
- 1 flexible hose, GY series 1500mm, yellow, with final valve.
- 1 IPERVAC flexible hose 900mm 3/8" SAE.
- 2 access valves LOCK-VALVE.



Code	Model	Dial	Connection
04101135	K-SPY4PFA6-4-GYSS60-LV	A6	3x 1/4"SAE + 1x 3/8"SAE
04101136	K-SPY4PFA4-5-GYSS60-LV	A4	3x 5/16"SAE + 1x 3/8"SAE

Code	Dimensions	Weight
04101135	360 x 320 x 120 mm	2,5 kg
04101136	360 x 320 x 120 mm	2,5 kg

K-SPY4PFA6-4 / K-SPY4PFA4-5

4 ways manifold kit SPY series without hoses

Sturdy plastic suitcase containing:

- 1 manifold SPY 4 ways with gauges Ø80mm "Pulse free", Class 1.



Code	Model	Dial	Connection
04101137	K-SPY4PFA6-4	A6	3x 1/4"SAE + 1x 3/8"SAE
04101138	K-SPY4PFA4-5	A4	3x 5/16"SAE + 1x 3/8"SAE

Code	Dimensions	Weight
04101137	360 x 320 x 120 mm	1,5 kg
04101138	360 x 320 x 120 mm	1,5 kg



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4 ways manifold kit



REFRIGERANTS DIALS			
A4	R410A-R32	A6	R22-R134a-R404A-R407C

K-SPY2PFA6-4-GYSS60-LV K-SPY2PFA4-5-GYSS60-LV

2 ways manifold kit SPY series with hoses

Sturdy plastic suitcase containing:

- 1 manifold SPY (2 ways), with gauges Ø80mm "Pulse free", Class 1.
- 2 flexible hoses, GY series 1500mm, red and blue.
- 2 flexible hoses, GY series 1500mm, yellow, with final valve.
- 2 access valves LOCK-VALVE.

Code	Model	Dial	Connection
04101124	K-SPY2PFA6-4-GYSS60-LV	A6	1/4" SAE
04101125	K-SPY2PFA4-5-GYSS60-LV	A4	5/16" SAE

Code	Dimensions	Weight
04101124	360 x 320 x 120 mm	2,5 kg
04101125	360 x 320 x 120 mm	2,5 kg



K-SPY2PFA6-4 / K-SPY2PFA4-5

2 ways analysis "transparent" manifold kit SPY series without hoses

Sturdy plastic suitcase containing:

- 1 "transparent" manifold SPY (2 ways), with gauges Ø80mm "Pulse free", Class 1.

Code	Model	Dial	Connection
04101133	K-SPY2PFA6-4	A6	1/4" SAE
04101134	K-SPY2PFA4-5	A4	5/16" SAE

Code	Dimensions	Weight
04101133	360 x 320 x 120 mm	1,5 kg
04101134	360 x 320 x 120 mm	1,5 kg



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4 ways manifold kit

SPY 4-WAYS

REFRIGERANTS DIALS

A4

R410A-R32

A6

R22-R134a-R404A-R407C

4-WAYS MANIFOLD KIT IN CARRYING CASE WITH FLEXIBLE HOSES

Sturdy plastic case containing:

1 pc. 4-ways manifold

3 pcs. flexible hoses 1500 mm with or without ball valve

1 pc. flexible hose 900 mm

On request, the kit may be supplied with any combination



4-WAYS WITH DRY GAUGE Ø80 CLASS 1

3 flexible hoses 1500 mm with valve

1 flexible hose 900 mm 3/8"SAE

Code	Model	Dial	Connections
04101109	K-W4MSA6-4-CSA60	A6	3x1/4" + 1x3/8" SAE
04101110	K-W4MSA4-5-CSA60	A4	3x5/16" + 1x3/8" SAE

Code	Dimensions	Weight
04101109	360 x 320 x 120 mm	2,5 kg
04101110	360 x 320 x 120 mm	2,5 kg

IperVac



4-WAYS WITH "PULSE FREE" GAUGE Ø80 CLASS 1

3 flexible hoses 1500 mm with ball valve.

1 IperVac flexible hose 900 mm 3/8" SAE.

Code	Model	Dial	Connections
04101112	K-W4PFA6-4-GYSA56V4	A6	3x1/4" + 1x3/8" SAE
04101114	K-W4PFA4-5-GYSA56V4	A4	3x5/16" + 1x3/8" SAE

Code	Dimensions	Weight
04101112	360 x 320 x 120 mm	2,5 kg
04101114	360 x 320 x 120 mm	2,5 kg

IperVac



4-WAYS PISTON WITH "PULSE FREE" GAUGE Ø80 CLASS 1 WITH 2 LOCK-VALVE

3 flexible hoses, 1500 mm with 2 supplied LOCK-VALVE.

1 IperVac flexible hose 900 mm 3/8" SAE.

Code	Model	Dial	Connections
04101122	K-PW4PFA6-4-GYSS60-LV	A6	3x1/4" + 1x3/8" SAE
04101123	K-PW4PFA4-5-GYSS60-LV	A4	3x5/16" + 1x3/8" SAE

Code	Dimensions	Weight
04101122	360 x 320 x 120 mm	2,5 kg
04101123	360 x 320 x 120 mm	2,5 kg



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4 ways manifold kit

PLASTIC CASE FOR MANIFOLDS

Code	Model	Dimensions	Weight
14029060	VP/B13	360 x 320 x 120 mm	0,75 kg

REFRIGERANTS DIALS
A4

R410A-R32

A6

R22-R134a-R404A-R407C

2-WAYS MANIFOLD KIT IN CARRYING CASE WITH FLEXIBLE HOSES

Sturdy plastic case containing:
 1 pc. 2-ways manifold
 3 pcs. flexible hoses 1500 mm with or without ball valve
 On request, the kit may be supplied with any combination

2-WAYS WITH DRY GAUGE Ø80 CLASS 1

Flexible hoses 1500 mm without ball valve.

Code	Model	Dial	Connections
04101101	K-F2MSA6-4-CSA60	A6	3x1/4"
04101106	K-F2MSA4-5-CSA60	A4	3x5/16"

Code	Dimensions	Weight
04101101	360 x 320 x 120 mm	2,5 kg
04101106	360 x 320 x 120 mm	2,5 kg


2-WAYS WITH "PULSE FREE" GAUGE Ø80 CLASS 1

Flexible hoses 1500 mm with ball valve.

Code	Model	Dial	Connections
04101107	K-F2PFA6-4-GYSA56V4	A6	3x1/4"
04101108	K-F2PFA4-5-GYSA56V4	A4	3x5/16"

Code	Dimensions	Weight
04101107	360 x 320 x 120 mm	2,5 kg
04101108	360 x 320 x 120 mm	2,5 kg


2-WAYS PISTON WITH "PULSE FREE" GAUGE Ø80 CLASS 1 WITH 2 LOCK VALVE

Blu and red flexible hoses, 1500 mm with 2 supplied LOCK-VALVE.
 Yellow flexible hose with ball valve.

Code	Model	Dial	Connections
04101120	K-PF2PFA6-4-GYSS60-LV	A6	3x1/4"
04101121	K-PF2PFA4-5-GYSS60-LV	A4	3x5/16"

Code	Dimensions	Weight
04101120	360 x 320 x 120 mm	2,5 kg
04101121	360 x 320 x 120 mm	2,5 kg


PLASTIC CASE FOR MANIFOLDS

Code	Model	Dimensions	Weight
14029060	VP/B13	360 x 320 x 120 mm	0,75 kg


Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4-ways manifold kit