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IEC-534-6

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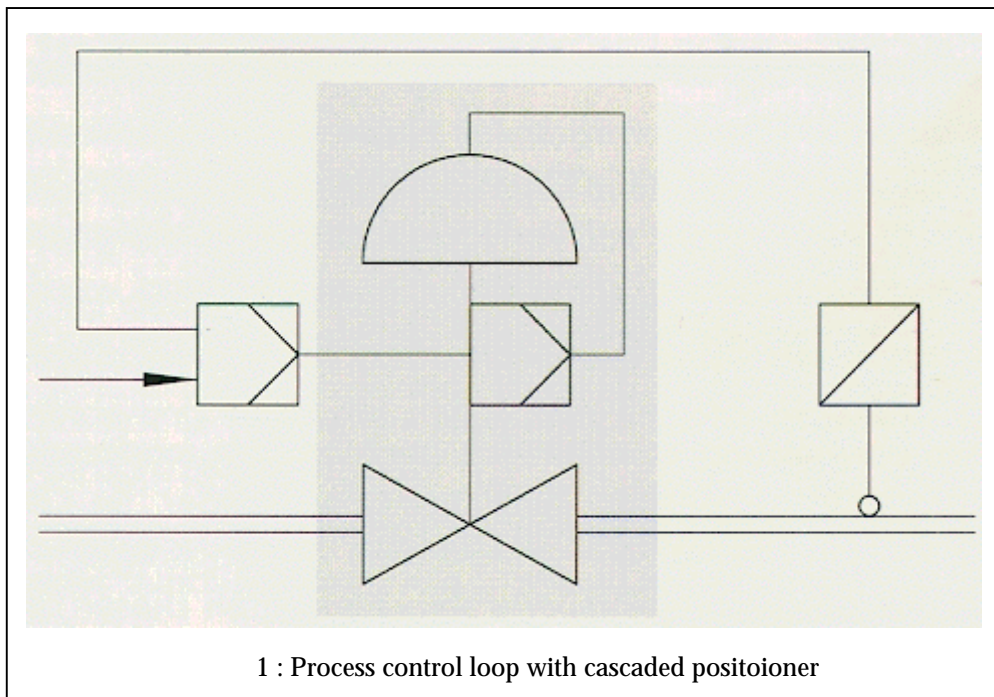
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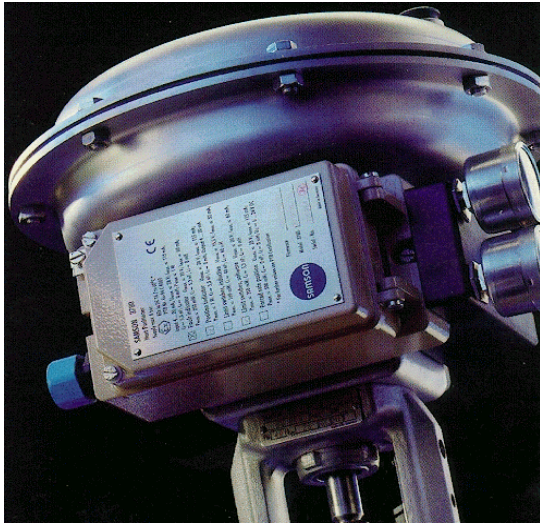
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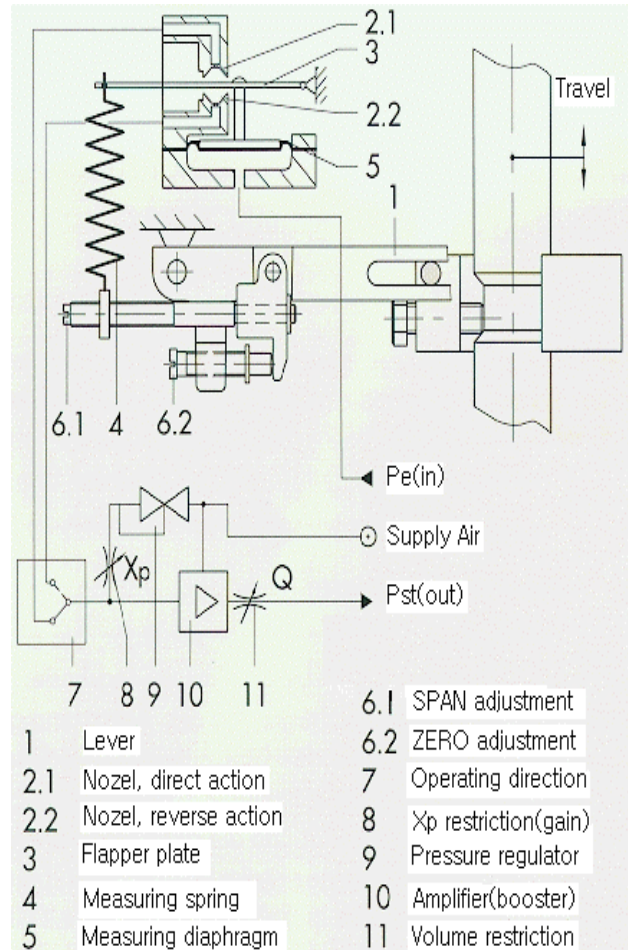




2 :

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 (4-20
 mA) I/P



3 : Function diagram

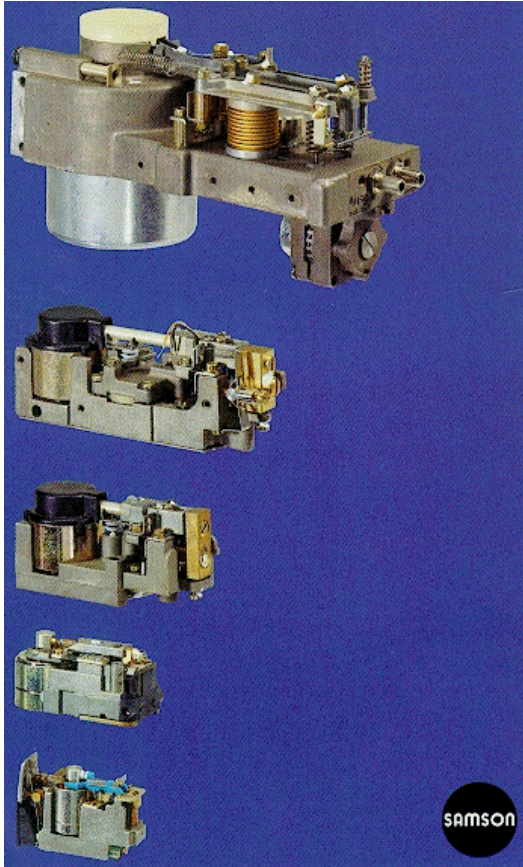
(3)
 (3 -- 15 PSI 0.2-1.0 BAR)

(3-15 PSI 0.2-1.0 BAR)

, I/P

(4)

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4 : Size reduction of i/p converters

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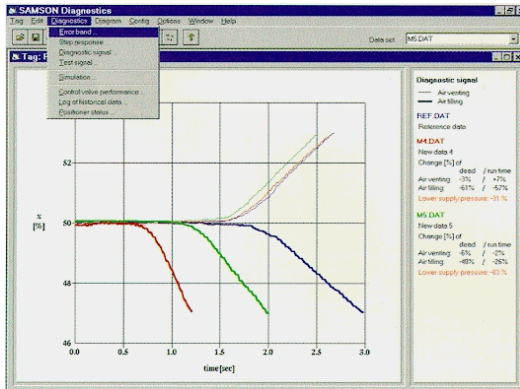


5 : Point-to-point

HART PROTOCOL

PROFIBUS-PA

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6 : Control valve diagnostics by analysis of control dynamics

HART networking via... Point-to-point	Communication with A single device
Multiplexer Point-to-point	Several HART devices in sequence
Multidrop operation (digital)	Maximum 15 devices (I analog = 4mA)
Via shared current loop	Control valve in split-range operation
Bus with FSK isolating amplifier(Hartmann&Braun)	Up to one hundred devies

1 : HART

* PROFIBUS-PA

* HART PROTOCOL

TWO-WIRE SYSTEM

, 1989

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EN 50170

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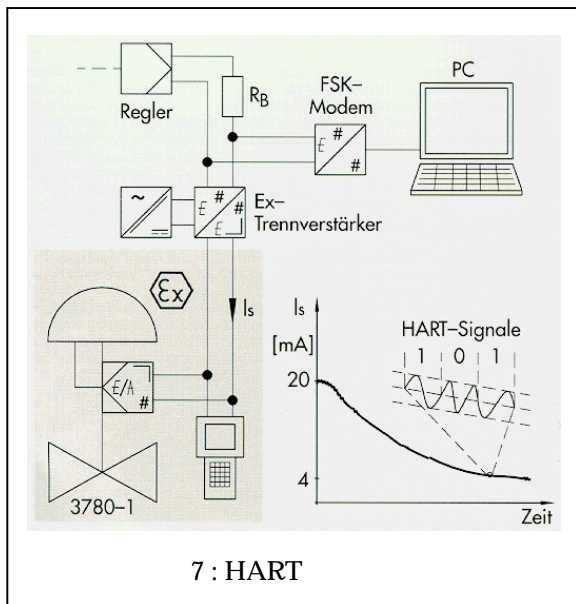
HART

.(10 , 2)

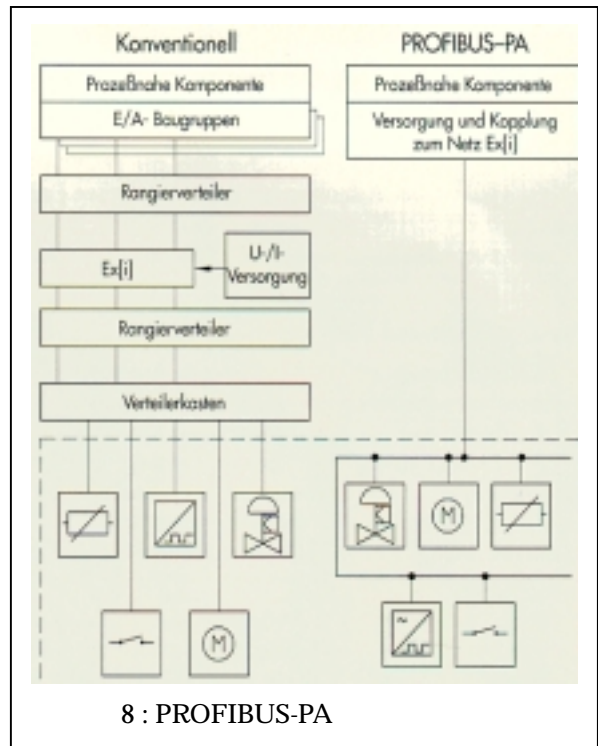
PROTOCOL

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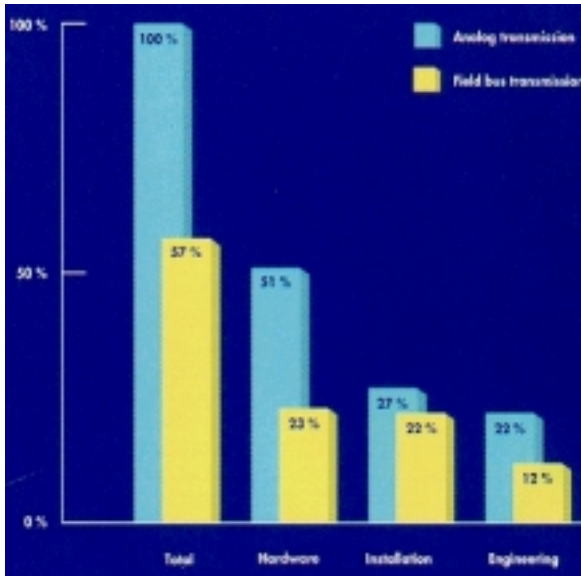
FIELD BUS(PROFIBUS-PA)



7 : HART



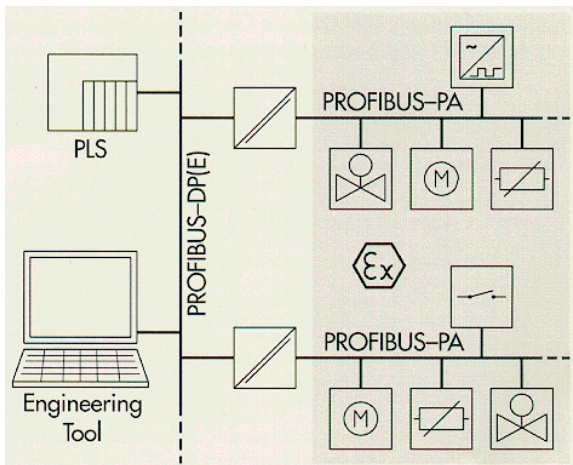
8 : PROFIBUS-PA



9 : PROFIBUS-PA

HART, FIELDBUS(PROFIBUS-PA
FIELDBUS FOUNDATION)

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10 : PROFIBUS-PA,DP

Positioner	Analog control signal	Micro-Processor	Digital communication	Operation of additional functions
Type 3776 pneumatic	3 to 15 psi	no	-	-
Type 3767 Electro-pneumatic	4(0) to 20mA	no	-	-
Type 3781 Digital	4(0) to 20mA	yes	-	At the device on Site
Type 3780 HART device	4(0) to 20mA	yes	Via HART protocol	Via terminals -PC -handheld
Type 3785 Profibus device	-	yes	Via PROFIBUS-PA	Via fieldbus master