

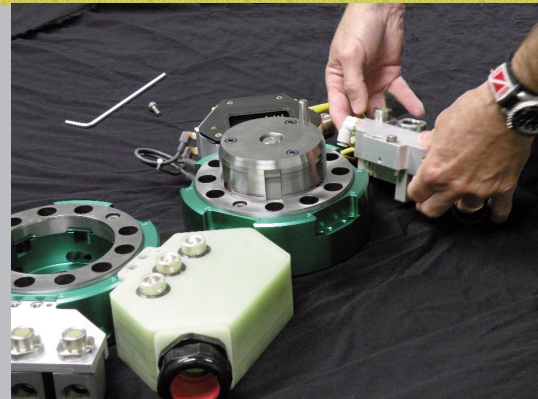
# SmartChange Modules

## for the 125, 160, 200, 250

Heavy-duty modular tool changers

Higher strength, lower weight and a low profile maximizes robot load capability, while enhanced modularity and interchangeability increases flexibility.

Smaller. Smarter. Stronger.



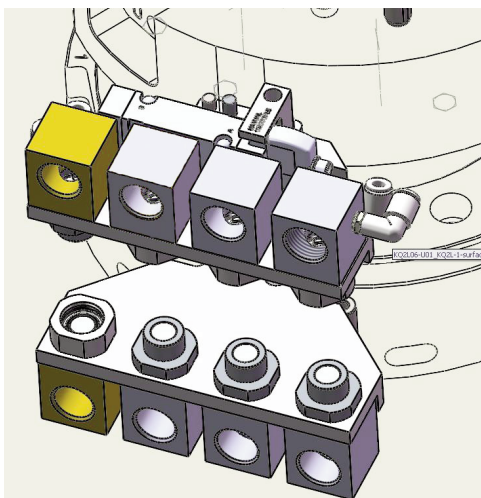
### Features and Benefits

- All modules are interchangeable among all SmartChange Tool Changer models.
- Valve Module now incorporates air and fluid fittings to allow for a greater total number of utilities and more application flexibility.
- The valve module connections for both pneumatic and electric signals utilize quick-connect type fittings and connectors for ease of integration.
- HiKVA (weld module) provides for both left or right hand cable orientation for flexibility in cable management.

### Typical Applications

- Spot welding
- Material handling
- Machine loading/unloading
- Mold changing
- Docking systems
- Pick and place operations
- Press transfer

### Valve Modules (with Air and/or Coolant Fittings)



Module Robot / Tool	Valve Specifications		Pass-through fitting specifications				
	Working Pressure	Cv	Number of fittings		Thread size/type	Maximum Working Pressure	Cv
			air	coolant			
SMR-V-A1N	4-6 Bar (60-90 psi)	.93	1	0	1/2" NPT	17 Bar (250 psi)	1.54
SMR-V-A2N			2	0			
SMR-V-A4N			4	0			
SMR-V-A1G			1	0	G1/2 (BSPP)		
SMR-V-A2G			2	0			
SMR-V-A4G			4	0			
SMR-V-A1C2N			1	2	1/2" NPT		
SMR-V-A2C2N			2	2			
SMR-V-A1C2G			1	2	G1/2 (BSPP)		
SMR-V-A2C2G			2	2			

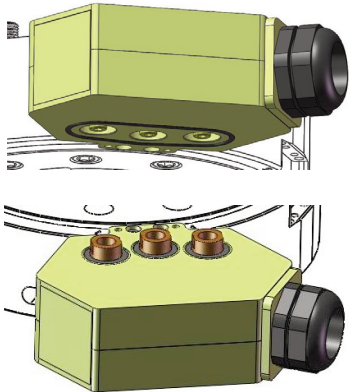
Not exactly what your application requires?  
Applied Robotics can design a solution that meets your particular application needs.

## Air and Fluid Modules



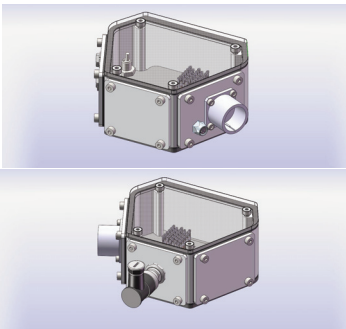
Module Robot / Tool	Number of fittings		Thread Size/ type	Maximum Working Pressure	Cv
	air	coolant			
SMR-F-A1N / SMT-F-A1N	1	0	1/2" NPT	17 Bar (250 psi)	1.54
SMR-F-A2N / SMT-F-A2N	2	0			
SMR-F-A4N / SMT-F-A42N	4	0			
SMR-F-A1G / SMT-F-A1G	1	0	G1/2 (BSPP)		
SMR-F-A2G / SMT-F-A2G	2	0			
SMR-F-A4G / SMT-F-A4G	4	0			
SMR-F-A1C2N / SMR-F-A1C2N	1	2	1/2" NPT		
SMR-F-A2C2N / SMR-F-A2C2N	2	2			
SMR-F-A1C2G / SMR-F-A1C2G	1	2	G1/2 (BSPP)		
SMR-F-A2C2G / SMR-F-A2C2G	2	2			

## HiKVA Modules



Module	No. of contacts	Wire Gauges Accepted	Contact rating		Connector type	Conductor type accepted
SMR-H-200-PG36-1	3	25mm <sup>2</sup> (4 AWG) 35mm <sup>2</sup> (2 AWG)	200 Amps continuous	600V	PG36 Strain relief	3 Conductor Jacketed cable 27-32mm OD
SMT-H-200-PG36-1	3	25mm <sup>2</sup> (4 AWG) 35mm <sup>2</sup> (2 AWG)			PG36 Strain relief	

## I/O Modules



Module Robot / Tool	Contacts	Rating
SMR-E-24.5-M27-V-TSM / SMT-E-24.5-M27-V-TSM	24	5 Amps
SMR-E-52.5-M27-V-BM / SMT-E-52.5-M27-V-BM	52	5 Amps
Connector Type	Conductor Type	Cable Diameter
(1) 28Pin M27	1(28) Conductor, 20GA	14.5mm Max OD
(2) 28Pin M27	2(28) Conductor, 20GA	14.5mm Max OD

## DeviceNet Ethernet Module also available

648 Saratoga Road  
Glenville, NY 12302 USA  
518 384 1000 tel  
518 384 1200 fax

29193 Northwestern Hwy. #509  
Southfield, MI 48034 USA  
248 358 3677 tel  
248 358 2654 fax

[www.appliedrobotics.com](http://www.appliedrobotics.com)

