



**WKVM05**  
**CONTROL VALVE**



## WKVM 05

### Monoblock Directional Control Valve

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## General Specifications

### Genel Özellikler

#### Product Features

- WKVM05 is compact, single section control valve for open and closed center system.
- Valve is equipped with an adjustable main relief valve
- Available in parallel circuit
- Wide range of spool options and positioners
- Interchangeable Spools

#### Özellikler

- WKVM05 açık ve kapalı merkez sistemlerde kullanılabilen, kompakt ve tek sürgülü kontrol kumandasıdır.
- Ayarlanabilir Ana Emniyet Valfi
- Paralel Devre
- Çeşitli Sürgü Tipleri ve Kontrolleri
- Değiştirilebilir Sürgüler

#### Standard Material Specifications Standard Malzeme Özellikleri

High Resistance Cast Iron Body *Döküm Gövde*  
Hard Chromium Plated Interchangeable Spools *Sertleştirilmiş Krom Kaplama Sürgüler*  
Steel spring caps *Çelik Yay Kapakları*  
Aluminium Lever Caps *Aluminyum Sap Kapakları*  
NBR Seals *NBR Sızdırmazlık Elemanları*

#### Working Conditions Çalışma Şartları

Recommended Oil Viscosity Range *Önerilen Yağ Viskozite Aralığı* **10 cSt to 75 cSt**

Recommended Fluid Temperature Range *Önerilen Çalışma Sıcaklığı (°C)* **-20 to +80**

Environmental Temperature Range *Önerilen Ortam Sıcaklığı (°C)* **-35 to +60**

Maximum Contamination Level *Maksimum Kirlilik Seviyesi* **Class 10 (NAS 1638) 19/16 (ISO 4406)**

#### Technical Specifications Teknik Özellikler

Nominal Flow *Debi* **35 lpm** **10 US gpm**

Number of Spools *Dilim Sayısı* **1**

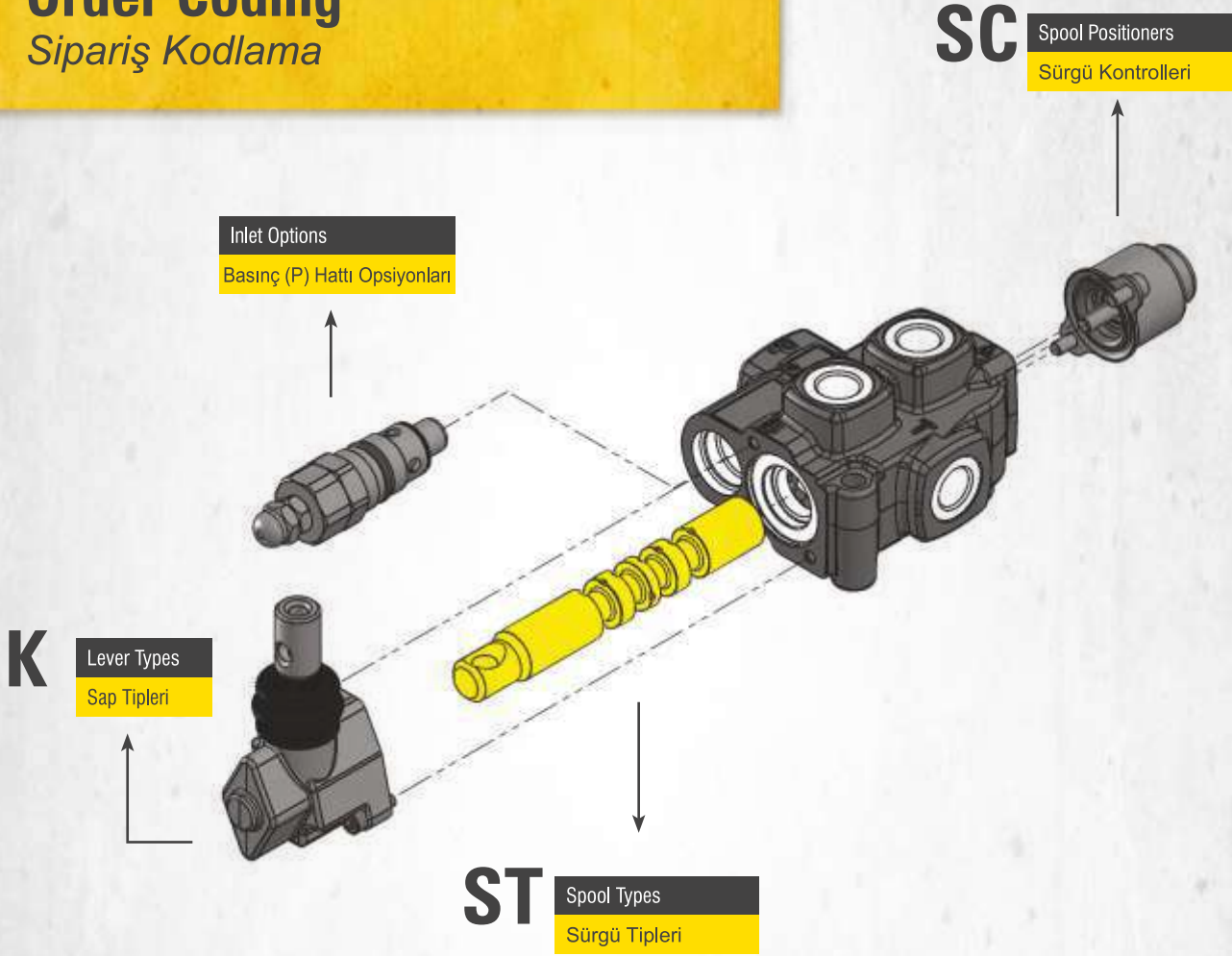
Maximum Working Pressure *Maksimum Çalışma Basıncı* **315 bar** **4600 psi**

Maximum Back Pressure *Maksimum Tank Hattı Basıncı* **30 bar** **430 psi**

Internal Leakage *İç Kaçak Değeri* **4 cc - 9 cc** **0,24 - 0,54 in<sup>3</sup>/m**  
(100 Bar; 32 cSt, 40°C) (1450 psi; 32 cSt, 104°F)



**Order Coding**  
*Sipariş Kodlama*



WKVM05A -

1

R(160) /

2

SC4

ST11

K3

3

1

**Valve Type** *Valf Tipi*

**WKVM05** Valve Series *Valf Serisi*  
**A** Port Thread *Port ölçüleri*

2

**Inlet Options** *Pompa (P) Hattı Opsiyonları*

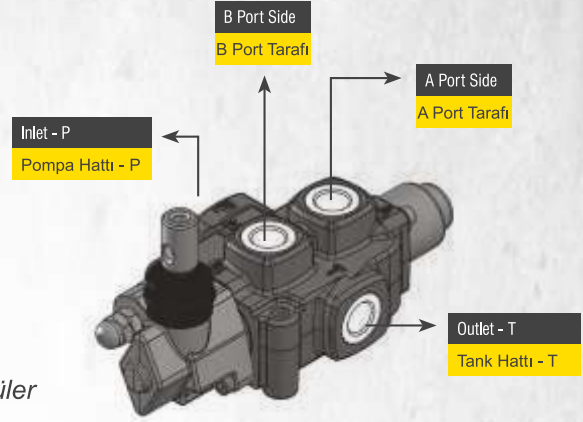
**R** Main Relief Valve *Ana Emniyet Valfi*  
**160** Pressure Setting *Basınç Değeri*

3

**Working Section** *Dilim*

**SC4** Spool Positioners *Sürgü Kontrolleri*  
**ST11** Spool Options *Sürgü Tipleri*  
**K3** Lever Types *Sap Tipleri*

## Dimensional Data Ölçüsel Bilgi

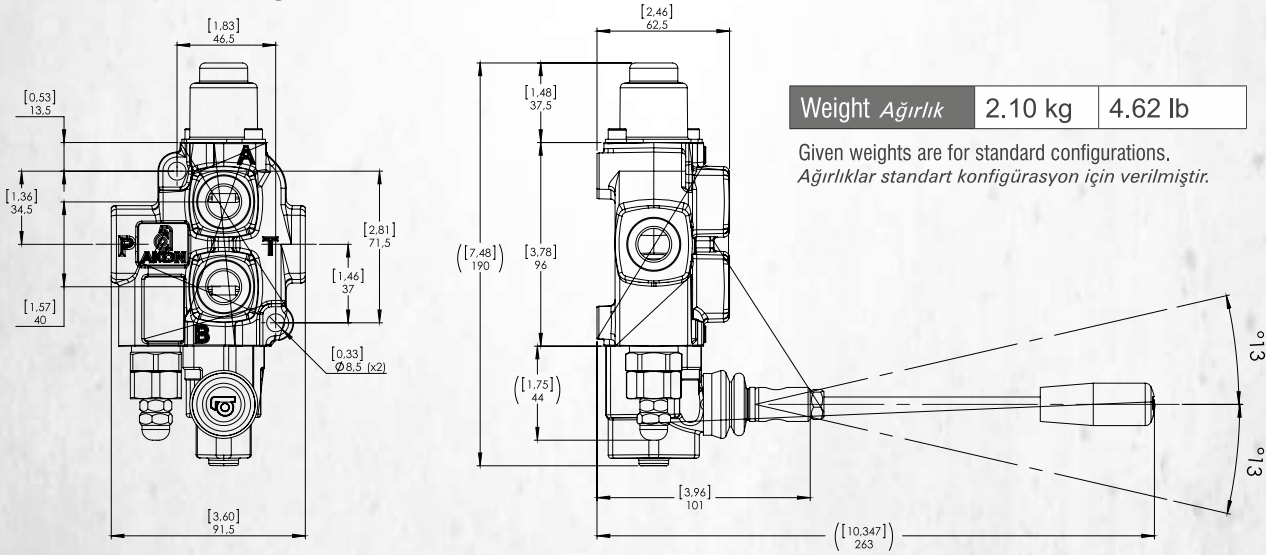


### Standard & Optional Threads Standart ve Opsiyonel Ölçüler

Thread Çalışma Şartları	Code Kod	P - P1-T1	
BSP(Standard)	A	G 3/8"	G 3/8"
UN-UNF	L	9/16 - 18 (SAE 8)	9/16 - 18 (SAE 8)

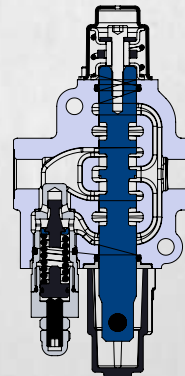
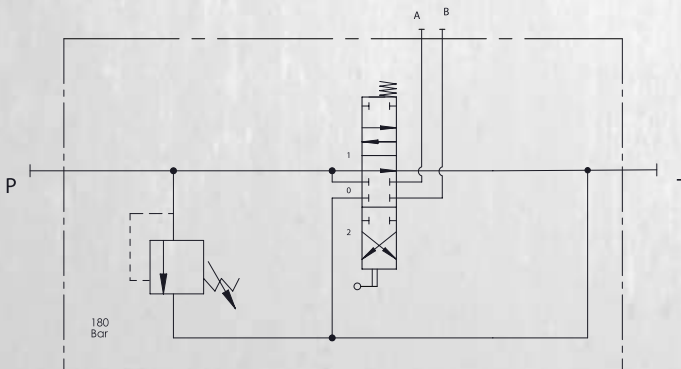
BSP threads are standard threads. Its necessary to code the port thread after valve series during ordering in monoblock valves. Example coding; WKVM05A-R(160)/SC1ST1  
Valflerimiz standart olarak BSP Diş üretilmektedir. Talep edilen port ölçüleri monoblok valflerde valf tipi kodlamasından hemen sonra kodlanır. Örnek Kodlama; WKVM05A-R(160)/SC1ST1

### Dimensions & Weight Ölçüler ve Ağırlık



### Hydraulic Specification Hidrolik Devre

Standard configuration; Parallel circuit with side inlet and outlet.  
Standart konfigürasyon; Paralel devre, yan P ve T şeklindedir.

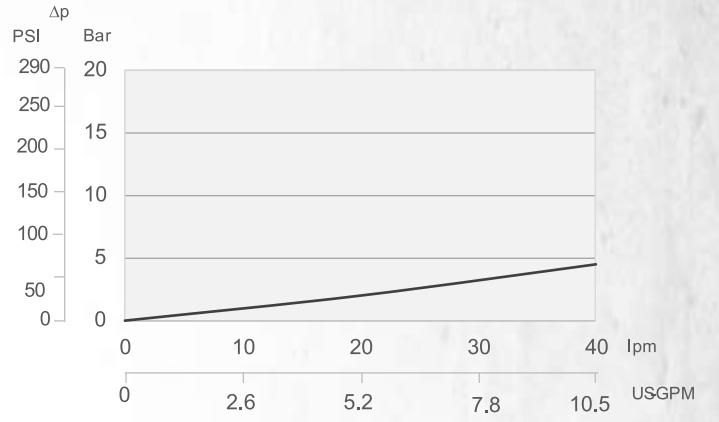
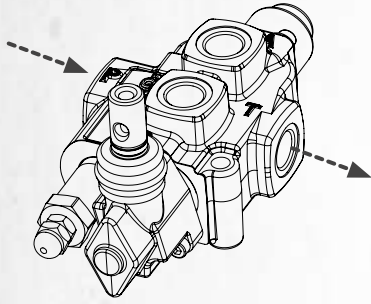


## Performance Data

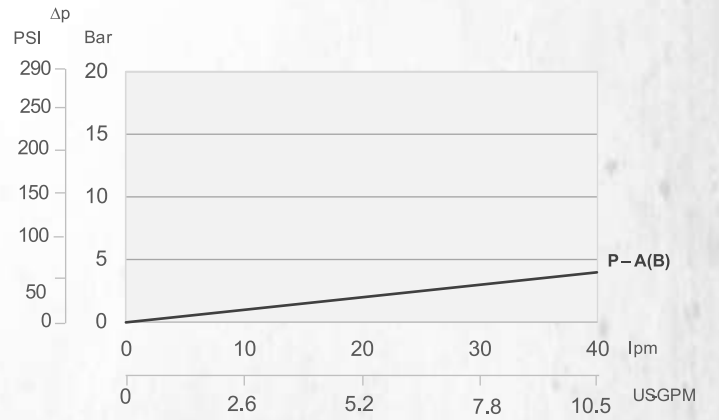
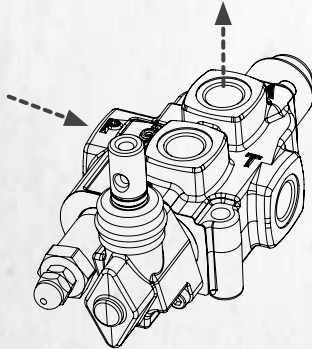
### Performans Eğrileri

#### Pressure Drop Curves *Basınç Kayıp Eğrileri*

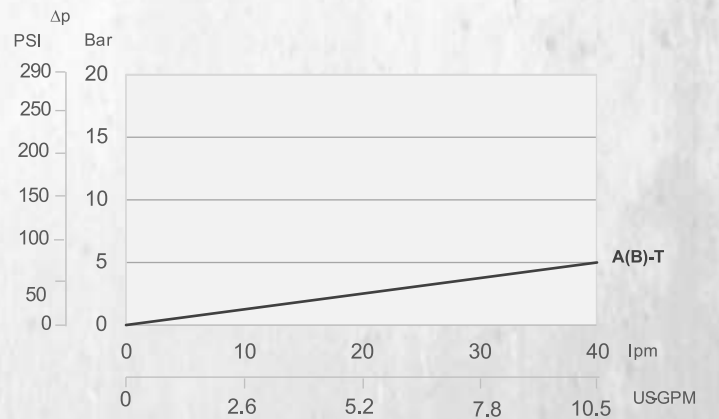
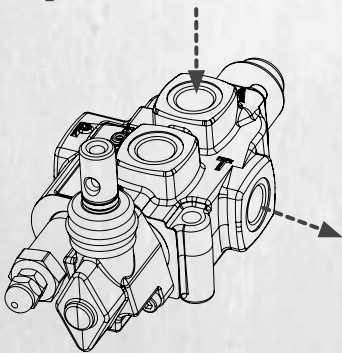
**P - T**



**P - A/B**



**A/B - T**

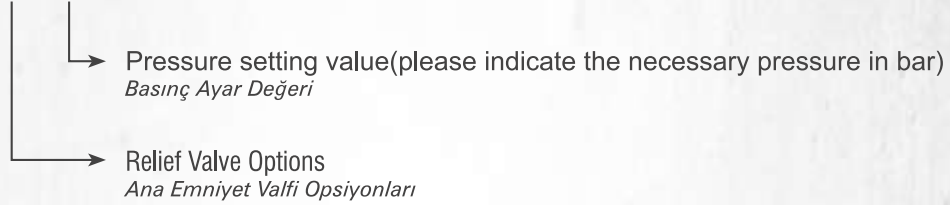




## Inlet Option

*Basınç (P) Hattı Opsiyonları*

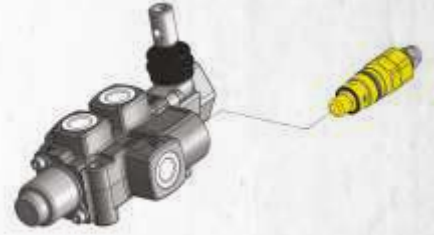
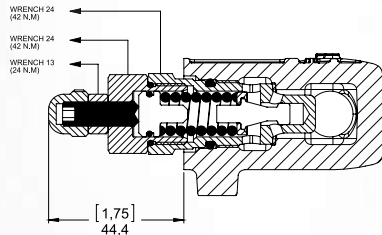
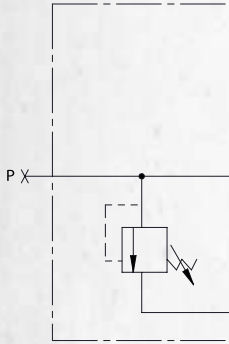
WKVM05A - R(160) / SC4 ST11 K3



### Adjustable Direct Acting Main Relief Valve *Ayarlanabilir Ana Emniyet Valfi (Direk Etkili)*

Code / Kod

**R**

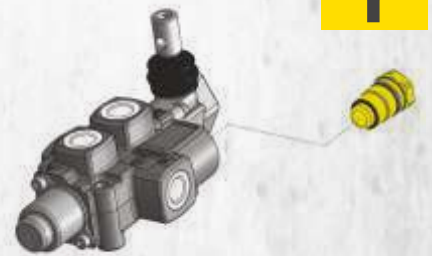
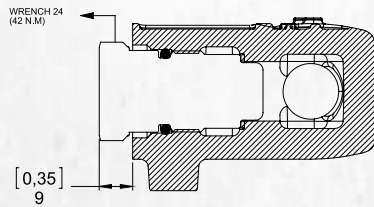
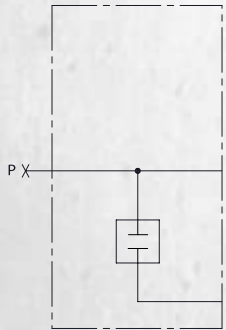


Please indicate the necessary pressure setting value. MRV is preset to 180 Bar at 15 lpm unless otherwise specified.  
*Lütfen ayarlanmasını istediğiniz basınç değerini bildiriniz. Ürünler standart olarak 15 lt/dk'da 180 Bara ayarlanır.*

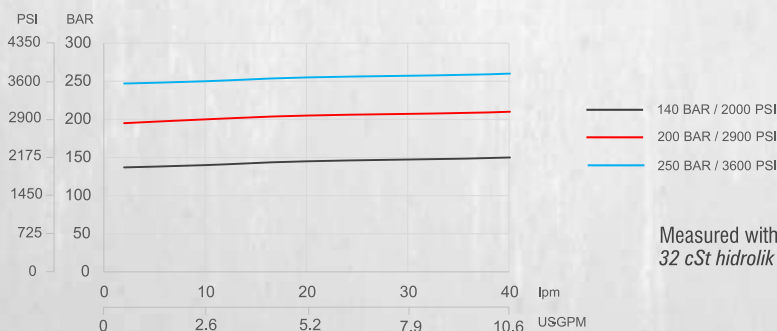
### Main Relief Valve Blanking Plug *Emniyet Valfsiz*

Code / Kod

**Y**



### Main Relief Valve Performance Data *Ana Emniyet Valfi Performans Eğrisi*



Measured with 32 cSt hydraulic oil @ 40°C and neglected tank line pressure.  
*32 cSt hidrolik yağ ile 40°C'de, tank hattı basıncı ihmal edilerek ölçülmüştür.*

# Spool Positioners

## Sürgü Kontrolleri

WKVM05A - R(160)/

**SC4**

ST11

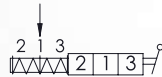
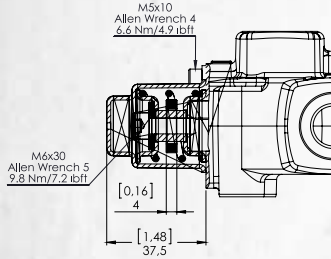
K3

↳ Spool Positioners  
Sürgü Kontrolleri

### Spool Positioners with Spring Return *Yay Dönüslü Sürgü Kontrolleri*

**SC1**

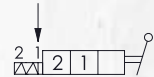
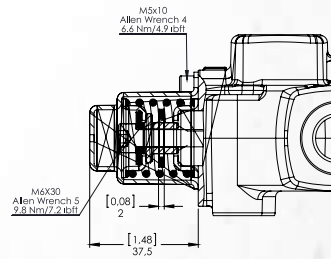
3 Positions Spring Return  
3 Pozisyon Yaylı



Stroke :  $\pm 5.5$  mm

**SC5**

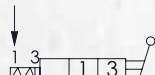
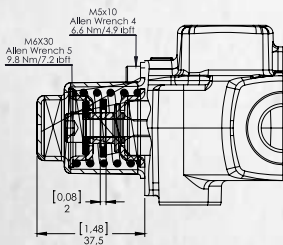
2 Positions Spring Return  
2 Pozisyon Yaylı



Stroke : -5.5 mm

**SC6**

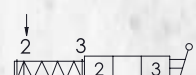
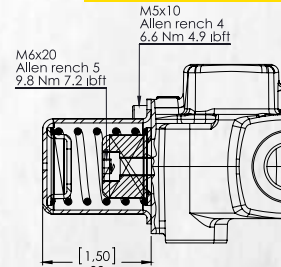
2 Positions Spring Return  
2 Pozisyon Yaylı



Stroke :  $\pm 5.5$  mm

**SC11**

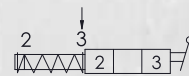
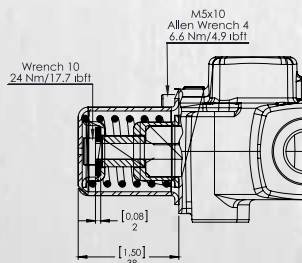
2 Positions Spring Return in 3rd Position  
2 Pozisyon, 3. Pozisyona Yaylı



Stroke : +11 mm

**SC12**

2 Positions Spring Return in 2nd Position  
2 Pozisyon, 2. Pozisyona Yaylı



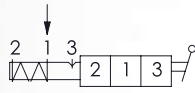
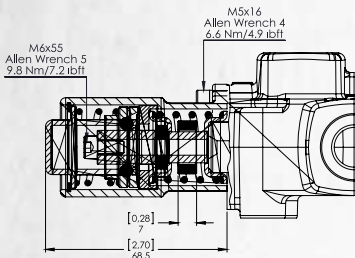
Stroke : -11 mm



# Spool Positioners with Detent

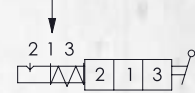
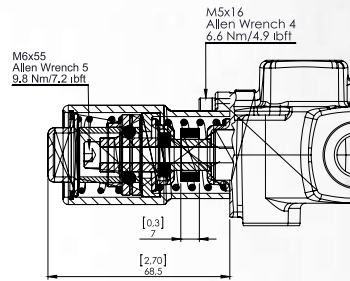
## Detantlı Sürgü Kontrolleri

**SC2** 3 Position Spring Return, Detent in Pos. 3  
3 Pozisyon Yaylı, 3.Pozisyon Detantlı



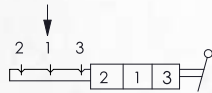
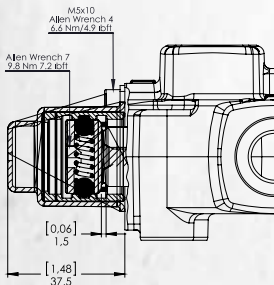
Stroke : ±5.5 mm

**SC3** 3 Position Spring Return, Detent in Pos. 2  
3 Pozisyon Yaylı, 3.Pozisyon Detantlı



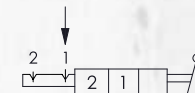
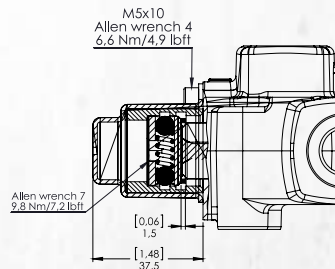
Stroke : ±5.5 mm

**SC4** 3 Position Detent in All Positions  
3 Pozisyon Detantlı



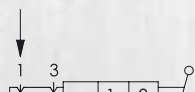
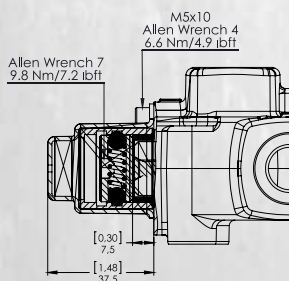
Stroke : ±5.5 mm

**SC7** 2 Position Detent  
2 Pozisyon Detantlı



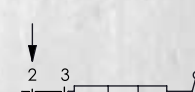
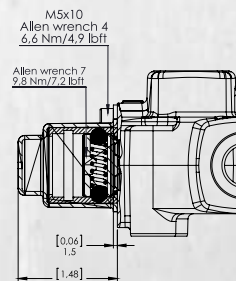
Stroke : -5.5 mm

**SC8** 2 Position Detent  
2 Pozisyon Detantlı



Stroke : +5.5 mm

**SC13** 2 Position Detent  
2 Pozisyon Detantlı



Stroke : +11 mm

# Spool Options

## Sürgü Tipleri

WKVM05A - R(160)/

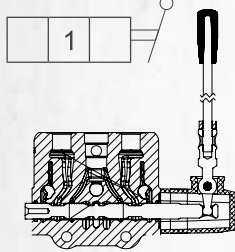
SC4

ST11

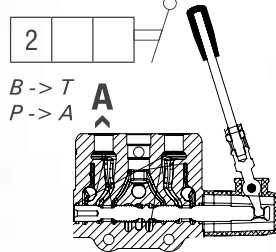
K3

Spool Options  
Sürgü Tipleri

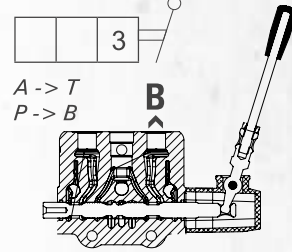
1st Position  
1. Pozisyon  
Spool Neutral Position  
Nötr



2st Position  
2. Pozisyon  
Spool In Position  
Mil İçerde



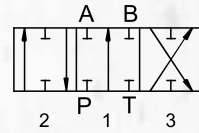
3st Position  
3. Pozisyon  
Spool Out Position  
Mil Dışarda



**ST1**

3 Position, Double Acting

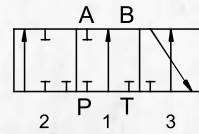
3 Pozisyon, Çift Etkili



**ST2**

3 Position, A Port Single Acting

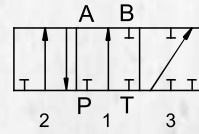
3 Pozisyon, A Port Tek Etkili



**ST3**

3 Position, B Port Single Acting

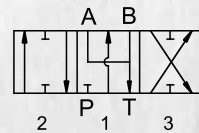
3 Pozisyon, B Port Tek Etkili



**ST11**

3 Position, Double Acting, A/B to Tank

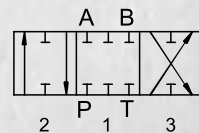
3 Pozisyon, Çift Etkili A ve B Tanka Açık



**ST4**

3 Position, Closed Center

3 Pozisyon, Kapalı Merkez



## Lever Types Sap Tipleri

WKVM05A - R(160)/

SC4

ST11

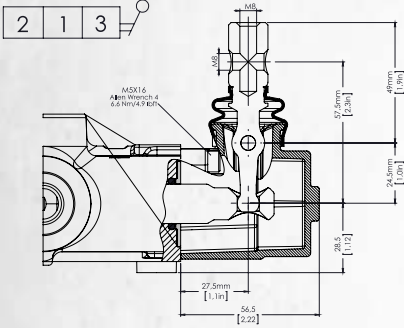
**K3**

Lever Types  
Sap Tipleri

**NO  
CODE**

Standard Lever Kit

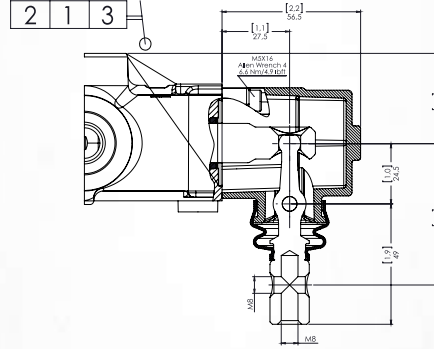
Standart Sap Kapađı



**K1**

Reverse Lever Kit

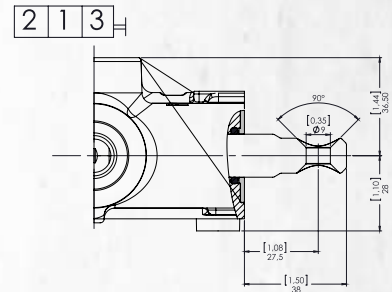
Ters montaj Sap Kapađı



**K2**

No Lever

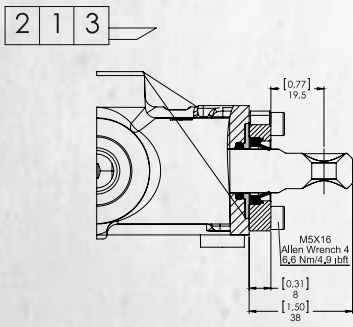
Sap Kapaksız



**K3**

Dust Proof Plate Kit

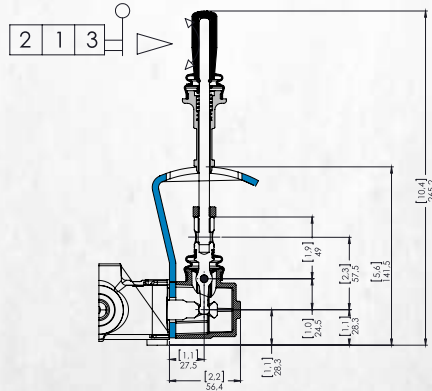
Toz Kapaklı



**K4**

Safety Lever

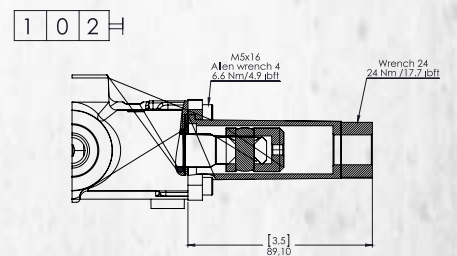
Güvenlik Kolu



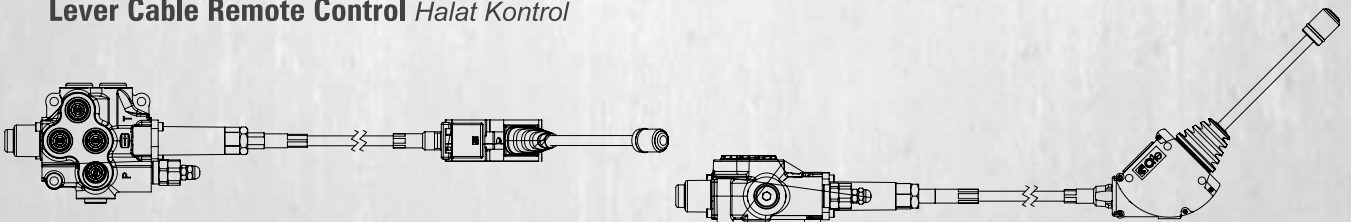
**KT**

Cable Connection Kit

Kablo Bađlantı Kiti



### Lever Cable Remote Control Halat Kontrol





SERIES CIRCUIT  
PARALEL CIRCUIT  
Pneumatic  
Hydraulic  
CONTROL  
REMOTE JOYSTICK  
CABLE REMOTE  
LEVER  
SPOOL  
MONOBLOCK VALVE  
Directional Control  
OIL VISCOSITY  
BSP  
COIL CONNECTION  
MAIN RELIEF VALVE  
Inlet  
Outlet  
CARRY-OVER  
CLOSED CENTER PLUG



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